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ABSTRACT

The goal of this report is said to be to review current approaches in psychological anthropology in such a way as to demonstrate what are perceived to be their relevance and importance to an adequate anthropology of education. Part One examines the trends seen emerging in the study of perception and cognition which those interested in education should find valuable. Part Two reviews research in socialization process emphasizing that education is embedded in a sociocultural matrix. It is argued that educational practices, in any given culture, arise from the requirements of the maintenance systems of that culture. In Part Three, the importance of historical context (migration and change) and situational factors (minority status) are argued. Some specific researches with various groups for whom the educational literature has had some interest, and in some cases preoccupation, are examined. The concluding section: (1) recommends how psychological anthropologists might more effectively influence educational research; (2) builds on the material previously presented, some delineation of priority problems in education; and; (3) as an overview, takes up a fundamental criticism which might appear to argue that psychological anthropology, despite what has been said here, does not have relevance to the study of education. (Author/JM)

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PSYCHOLOGICAL ANTHROPOLOGY AND EDUCATION:

A Delineation of a Field of Inquiry

Charles Harrington

Final Report for the Committee on Anthropology and
Education of the
National Academy of Education
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INTRODUCTION

The goal of this report is to review current approaches and findings in psychological anthropology in such a way as to demonstrate what I perceive to be their relevance and importance to an adequate anthropology of education.

In meeting its goal this paper, of necessity, must abstract from the vast material generated by researchers in psychological anthropology certain topics which this author feels are the most directly or immediately relevant to education. What follows does not pretend to be a summary of research in the field of psychological anthropology (see Barnouw 1973), but is limited to that research likely to lead to a psychological anthropology of education.

The field of inquiry known by the rubric psychological anthropology is concerned "with human behavior primarily in terms of the ideas which form the basis of the interrelationship between the individual and his society" (Hsu 1972:6). The field "take[s] it for granted that there is some connection between the make up of a culture and the particular personality (or personalities) of its human characters. By "personality" we can mean two things. We can mean, first, the sum-total of the overt modes of behavior of an individual, in which we discern some integration and consistence, and which we thus understand to be facets or "traits" of that totaled patterned entity. Or secondly, we can mean some basic mental make-up underlying the pattern of overt behavior and accounting for it in the sense of a hidden machine or a casually effective set of "factors" (Nadel 1951:405). While this broad conceptualization delimits an area of inquiry, it is not helpful in constructing the boundaries of that inquiry. As Hsu has pointed out, since all human behavior is mediated through individual human beings, all human behavior is at once psychological and social in nature (Hsu 1972:5).

As a practical matter we define as psychological anthropology works which fit one of the following descriptions:

> 1. A work of psychological anthropology is one by an anthropologist who has a good knowledge of psychological concepts or by the member of another discipline who has a good knowledge of anthropological concepts.
>
> 2. Any work that deals with the individual as the locus of culture.
>
> 3. Any work that gives serious recognition to culture as an independent or dependent variable associated with personality.
>
> 4. Any work by an anthropologist which uses psychological concepts or techniques or by a scholar in a psychological discipline which provides directly pertinent data in forms which are useable by anthropologists... (Hsu 1972:2).

The basic theoretical question that psychological anthropology raises is the one which most determines its relevance to the field of education--the question of enculturation. Psychological anthropology as a part of anthropology has a goal of explaining the diversity of human cultures, and how cultures, and hence the diversity, are maintained over time. To the psychological anthropologists the latter explanation lies in the ability of the culture to transmit itself from one generation to another, and, in the process, to grow and incorporate some change.

Surely it should not be necessary to construct arguments for the relevance to education of this branch of anthropology for the benefit of the Committee of Anthropology and Education of the National Academy of Education. This issue is not as clear as it might be, however. When anthropologists first became formally involved in the study of education and began to appear on the faculty of schools of education, their raison d'etre was often to overcome the tremendous dominance of the psychologists on the field. Thus many anthropologists of education in a sense made their careers, or at least justified their existences, by researching and behaving differently from psychologists. As a result, a curious imbalance has occurred within the field of anthropology and education. Because psychological anthropology (or culture and personality as LeVine, 1973 still prefers) was associated, at least to some, with psychology and psychiatry, anthropology-and-education scholars tended to ignore it or even to respond as if it were pretty much in the "enemy's" camp. That this trend continues to the present is evidenced by the fact that the recent Burnett (1974) bibliography of anthropology and education, commissioned by the Anthropology and Education Committee of the National Academy of Education and published under the sponsorship of the Council on Anthropology and Education of the American Anthropological Association, specifically excludes studies from psychological anthropology, at the same time acknowledging their possible significance.

It seems to me very likely that in linking their attitude toward psychology to psychological anthropology, anthropologists of education have (some might think in a very literal sense) thrown the baby out with the bath water. Accordingly, this paper reviews the literature of psychological anthropology, hoping to make it useable to students of education, while at the same time arguing its relevance to that inquiry. The general point is that no study of education can reasonably ignore the cross-cultural studies of learning process, socialization and social change of psychological anthropology. These are essential, indeed major, components of any anthropology and education.

Psychological anthropology, because it is embedded within anthropology, has three contributions to the study of education which it shares with the rest of the discipline and which taken together form the basic orientations for the studies which produce the substantive results to be discussed in detail below. These three orientations have to do with the *definition of education*, *method*, and *cross-cultural comparison*.

Anthropological definitions of education have consistently marked a point of departure between anthropology and other disciplines. Anthropologists have taken very broad views of education. They have insisted that education not be confused with the more narrow concept of "schooling." By defining education as encompassing both formal (or directed) as well as informal learning, the anthropological conceptualization of education has become quite nearly "everything that happens to a person throughout his lifetime," while definitions used by educators have occasionally been so narrow as to be limited to what a child learns through the formal curriculum in school. While several historians of education have, in recent years, argued that a definition of education which includes more than just schooling is essential (see e.g., Cremin 1970), it is still a defensible position that anthropology in general, and psychological anthropology in particular, has taken a broad view of education (and early on, see e.g., Whiting 1941), while those professionally concerned with education have taken more narrow views.

A second hallmark of anthropological approaches (and hence of a psychological anthropology of education) is the methodology brought to bear on the problems being researched. Social and psychological anthropology both share a dedication to the variety of techniques subsumed under the label participant observation. However, within that shared orientation, each has developed more specific, more specialized, ancillary methods in response to the problems each has chosen to solve. In particular, psychological anthropology has emphasized the importance of the systematic observation and recording of data, the use of adaptations of psychological techniques of personality measurement, projective testing, and experimental design to learn about individuals, and the analysis of "cultural products" as clues to learning and cognition. In addition to these methods, which are relevant to the concerns of this paper as techniques available to observe and assess educational outcomes and which are reviewed in Barnouw (1973), a part of the field has been concerned with producing what for our purposes we might call "narratives of education" or more traditionally, "life histories." These (more or less auto-) biographical materials provide vivid descriptions of growing up through adulthood in societies with and without formal schooling, and are especially relevant materials to those interested in education in its broadest sense. While the heyday of "life history" production was in the 30's and 40's, autobiographies continue to appear (e.g., Spradley 1969). An important development of the 50's and 60's, however, was the appearance of records of family histories which enabled the reader to compare descriptions of events from the point of view of various family participants. The pioneer and really sole artisan of these family autobiographies was, of course, Oscar Lewis; and while the expense and enormity of his undertakings has discouraged imitators, his works remain a legacy for those who would seek to understand the details of family interpersonal dynamics and their place in the socialization of children (Lewis 1951, 1961, 1965, 1969). However, narratives in general are out of fashion. They are, after all, secondary data, subject to the whims of recall and having dangers akin to those of the self-report methods of other disciplines (for a bibliography of life histories, see Langness 1965). The hallmark of the psychological anthropologists of the present is the generation of primary data, either by observation or through systematic elicitation.

The third anthropological orientation is that we insist on examining educational phenomena in a cross-cultural framework, as part of an anthropological commitment to the study of what Chase calls "contemporary man," everyone alive on earth. As such, we are not content with what so much of mainstream psychology, especially experimental psychology, often seems to be: the psychology of 100 undergraduates at a large midwestern university. While many psychologists have become aware of the necessity of broadening their subject base, the mainstream of the discipline is still culture bound. Similarly, while studies of our own society do occur in anthropology, the mainstream of the discipline almost excludes such study. Psychologists have tended to view the cross-cultural method as one by which certain assumptions about personality development may be tested.

Anthropologists, on the other hand, are more likely to focus on the shared aspects of human behavior and to use such studies as tests of hypotheses concerning the way in which elements of a culture can be integrated by underlying psychological processes.

The three anthropological orientations are implicit or explicit in a vast amount of substantive findings which are relevant to an informed inquiry into education. Much of it has appeared, however, in professional disciplinary journals and in forms not easily accessible to those other than fellow specialists conducting similar kinds of research. It is our purpose here to synthesize substantive material together into a coherent and integrated form, so as to make its relevance to educational inquiry apparent. In organizing the material I have delimited three major areas of inquiry as deserving of top priority for this report. Each is closely linked to each of the others, and some of our classifications of particular studies may appear arbitrary. My intent in setting up the three areas is not to enshrine each as a separate area of inquiry, but merely to represent an organizational tool whereby the vast amount of material we need to examine can be handled. The three areas for which psychological anthropology offers substantive findings are: Perception and Cognition, Socialization, and Social Change.

In examining the relevance of psychological anthropology to the study of education, I have chosen to begin the substantive review of the literature with an examination of studies of perception and cognition. There are good reasons for this. First, examining the learning process itself, we must be concerned with what individuals learn with, and for the purposes of this paper, that means their perceptual equipment; i.e., what they can be aware of which is a precondition of learning. Secondly, what do they do with their perceptions? We shall use the word cognition to refer to the structure of thought processes. Taken together, perception and cognition describe how people experience their world and think about it.

The term, "socialization," to denote the process by which culture is transmitted from one generation to the next, gained favor in the 1930's. One use of the term described the socialization process as "an account of how a new person is added to the group and becomes an adult capable of meeting the traditional expectations of his society" (Dollard 1935). While the term acquired formal acceptance in the 1954 review article by Child, anthropologists in particular have been unhappy with the term's emphasis on social roles and behavior to the exclusion of beliefs, values, and other cognitive aspects of culture. Alternate terms proposed have included "culturalization" (Kluckhohn 1939) and "enculturation" (Herskovits 1948). In this report the term "socialization" is often used as a synonym of the term "enculturation" in its broadest sense. This is the sense in which "socialization" is used by Hartley and Hartley, "as learning to be a member of a group. It means perceiving what is considered to be correct and essential in a group, accepting these precepts as right, good and necessary, and learning to behave in congruence with them. This progress includes ways of thinking, or feeling as well as ways of behaving, and it covers attitudes towards one's self as well as attitudes and behavior towards other people" (Hartley and Hartley 1952:206). Psychological anthropology views socialization as a learning process essential to the structure and continuation of every human (and more recently non-human--Poirer 1973) society.

While discussing socialization, cultures are treated as stable from generation to generation. In our discussion of social change we shall examine psychological anthropological studies of acculturation, initially in studies of migration and ethnicity within the United States, and then in terms of change and development outside the United States. We now examine the three areas in order.

I. Perception and Cognition

Students of education have long understood that knowledge about how children and adults experience their world and think about it is as important to their discipline as is knowledge about how people learn. The study of perception and cognition is considered fundamental to education; first, because these processes are assumed to be biological givens, universally employed by humans in all human groups; and second, because one must know how people perceive and think in order to understand what one can teach them and how to do it efficiently.

In relying primarily on psychologists for basic knowledge about perception and cognition, educators have been led astray in certain crucial respects. First of all, they have adopted explanations and theories of perceiving and thinking that were based on psychologists' culture-bound interpretations of these data. Second, they have adopted measurement techniques based on culturally restricted assumptions, and employing them, reached erroneous (not to mention racist) conclusions about the functioning of members of groups other than their own. Psychological anthropologists, in contrast, have searched both for cross-cultural uniformities and cultural differences in studying perception and cognition, with the goal of developing more universally applicable theories which would be useful in understanding education in its narrow sense as well as other aspects of enculturation.

The literature reviewed in this section is roughly divided into subsections concerned with "perceptual" processes and "cognitive" processes respectively. It is important to point out that this division is a completely arbitrary one, since the two terms actually refer to two inseparable aspects of a single process; for humans, at any rate, there are no perceptual processes in which cognitive processes do not play a part and no cognitive process that do not also involve some aspects of perception. One additional caveat is perhaps in order here. The substantive findings presented below represent only tentative and incomplete answers to the fundamental questions they address. Frequently they merely suggest reformulations of old questions, and it is these questions that we consider vital.

Perception

The importance of studies of perception can perhaps best be made clear by examining one of the first researches in the field, the by now famous Torres Straits Expedition reports of W. H. R. Rivers (Rivers 1901, 1905). While the susceptibility of the subjects to optical illusions may seem a trivial subject for study, the idea that impelled the Rivers research was embedded in late 19th century thought which dichotomized savages from civilized peoples, and which consistently searched for explanations--often racist--of why the subjects of travelers' reports had not advanced to "the higher stages of civilization" (Malinowski 1948:70). For the psychologists of the time, one explanation for the arrested development of the culture of the savages was "faulty equipment." That is, an inability to perceive as accurately as the European. In the section on cognition, we shall of course encounter the same argument, but there the suspect organ will be the brain, and the issue intellect.

Rivers set out to test comparatively the perceptual equipment of the savages with samples of European subjects, using optical illusion as an operationalization of perceptual ability: the more susceptible, the more inferior the equipment. Of course, whatever his findings, the idea, and its underlying but thickly veiled racism, has continued into the present. For example, in a prestigious review of the literature on cross-cultural measurement of perceptual and motor skills, Provins, Bell, Biensheuvel and Adiseshiah (1968) argue that the evaluation of perceptual skills in different cultural groups is important as a way of determining the "ease" with which a primitive group may accept technological advancement or be absorbed into a technologically more sophisticated society. The important thing about Rivers' results was the "fact that differences between Western and non-Western peoples exist in both directions; i.e., that the non-Western peoples seem to be less subject to one illusion while more subject to another." Obviously, the failure to find differences that are consistent in direction eliminates any simple explanation of the existing differences, including the view, prevalent during the 19th century, that since "primitive" peoples are less well endowed intellectually than "civilized" peoples, the former ought to be more easily duped by illusions and therefore consistently more subject to them. The suggestion in Rivers' data that the "primitives" might actually be less subject to the Muller-Lyer illusion is embarrassing to any such hypothesis" (Segal, Campbell, Herskovits 1966:64). Explanations of Rivers' findings had to recognize the significance of experience in the formation of inference habits that affect perception. In 1966 Segall, Campbell and Herskovits reported on an attempt to test the ideas raised by Rivers' research in a comparative study of illusion susceptibility in sixteen cultures. They conclude:

> Perception is an aspect of human behavior, and as such is subject to many of the same influences that shape other aspects of behavior. In particular, each individual's experiences combine in a complex fashion to determine his reaction to a given stimulus situation. To the extent that certain classes of experiences are more likely to occur in some cultures than in others, differences in behavior across cultures, including differences in perceptual tendencies, can be great enough even to surpass the ever-present individual differences within cultural groupings.
>
> We have reported here a study that revealed significant differences across cultures in susceptibility to several geometric, or optical illusions. It should be stressed that these differences are not "racial" differences. They are differences produced by the same kinds of factors that are responsible for individual difference in illusion susceptibility, namely, differences in experience. The findings we have reported, and the findings of others we have reviewed, point to the conclusion that to a substantial extent we learn to perceive; that in spite of the phenomenally absolute character of our perceptions, they are determined by perceptual inference habits; and that various inference habits are differentially likely in different societies. For all mankind, the basic process of perception is the same; only the contents differ and these differ only because they reflect different perceptual habits (Segall, Campbell and Herskovits 1966:213-214).

Segall, Campbell and Herskovits' accounts are not unchallenged. Jahoda (1966) points out that the simple ecological interpretation of "carpenteredness" led him to predict incorrectly differences between the Lobi and Dagomba on the one hand and the Ashanti on the other (all in Ghana) in susceptibility to Muller-Lyer and Horizontal-Vertical perceptions. Further, tribes with the same ecology have been found to show differing responses (based on data from Morgan 1959, Reuning 1959, and Mundy-Castle and Nelson 1962). Jahoda and Stacey (1970) reported a comparison of Ghanian students and Scottish students suggesting formal education not ecology as the critical variable. Other variables linked to illusion susceptibility are age (Walter 1942, Piaget and Morf 1956 [for Horizontal-Vertical]) and "sophisticated environment" (Wagner and Werner 1957). However, Dawson, Young and Choi (1973) have found support for the position that a carpentered world also contributes to the variance in illusion susceptibility.

The Segall, Campbell and Herskovits work still remains definitive, however, because of its scope and rigor. Failures to replicate its results in retesting any one group for comparison are not as worrisome for their analysis as would be a new cross-cultural study like their in which effects of formal education as well as environment could be tested. Too, it is interesting that the criticisms of Segall, Campbell and Herskovits come only from psychologists with other theoretical axes to grind and not from anthropology.

In addition to the "carpentered world" effect of the environment on perception, travelers and anthropologists have commented more informally on the impact of a physical environment on perception. Robert Flaherty, the filmmaker (Nanook of the North, Moana, Man of Aran, etc.) tells vividly of being on hunts with Nanook when Nanook would navigate through the snow by signs that he, Flaherty, could not "see." Clearly, immersion in an environment can enable a person to see differences so subtle that they are missed by a novice (e.g., degrees of packedness of snow, in the Flaherty case), or form automatic habits of visual inference which may be totally missed by the visitor who does not comprehend their significance; e.g., during a blizzard, the direction of fur on one's parka (if the wind is consistent) can tell relative direction (Carpenter, Varley, and Flaherty 1959).

This, and the "carpentered world" hypothesis, focus upon informal, experiential learning. The inferences we learn to make by being a part of a particular physical scene become established over time. Psychologists have also been fascinated with the effects of exposure to two-dimensional representation on visual differences. Specifically Hudson (1960) raised the question of the difficulty of perceiving three dimensions from two-dimensional representations like drawings and pictures for people unaccustomed to such phenomena. Anthropologists had noted these phenomena for years but Hudson (1960) presented a detailed examination of the problem which was followed up by several researchers (e.g., Mundy-Castle and Nelson 1962; Dawson 1963; Vernon 1965; Deregowski 1968, 1969; Deregowski and Byth 1970, Hudson 1962; and Mundy-Castle 1966). Hudson (1967) summarizes this research and explicitly deals with its relevance to education. He offers the following rare commentary on educational planners:

> We take it very much for granted that methods which are only moderately successful in our own cultures will prove equally, if not highly, successful in an alien culture. We fall into the error of thinking of the black man's mind as a tabula rasa, which we have only to fill with the benefits of our cultural experience in order to promote whatever objectives we have in mind. We forget or ignore the fact that the black man possesses his own indigenous culture.
>
> Is it rational of us to shut our eyes to the role that culture plays in education and in the assimilation and association of new concepts and practices? We do not ignore cultural and

> environmental differences among the national populations of Europe. Why should we do so in Africa? Even in such a limited field as that of pictorial perception, the facts, once we become aware of them, illustrate the gravity and extensiveness of our irrationality (Hudson 1967).

Kilbride (1971) and Kilbride and Robbins (1969) provide strong evidence for the position that for pictorial depth perception, visual perceptual skills are largely learned and significantly related to relative amounts of exposure to Western culture. Their data are from the Baganda of Uganda. At another level of study, Child (1968) examines judgments of the relative aesthetic quality of paintings by expert judges of several societies, and concluded that there was some generality to aesthetic principles. Ekman and Friesen (1971), Ekman, Sorenson and Friesen (1969), and Cuceloglu (1967) argue for a similar cross-cultural universality in emotion attributed to facial expressions.

The physical environment's effect on perception is often seen as mediated by language, to which effect on perception we now turn. Human languages provide their speakers with sets of categories into which experiences are classified. Snow is important to Eskimos; they distinguish types, ergo they are said to perceive snow differently than peoples who are not familiar enough with it to require more than one category. Linguists perfectly familiar with the inability of speakers of languages to "hear" sounds which are not phenomenally distinctive in their own tongue. Thus, English speakers often do not "hear" aspiration, etc. Many researchers have investigated the categorization of color, a particularly fascinating area in which to study classification, since objectively color is one continuum which can be arbitrarily divided into categories. This research has not produced much that I would consider directly relevant to educational inquiry, but a couple of observations are in order. Kellaghan's (1968) study of color categorization in African children using the Weigl-Goldstein-Scheerer color form sorting test and other instruments found Irish subjects performing better than their Nigerian (Yoruba) contemporaries. However, their data suggest that lack of familiarity with test materials could account for the supposed "deficits" in the Yoruba subjects, a finding which again emphasizes the learned aspects of category perception. More recently, Adams and Osgood (1973) presented data from a 23 culture semantic differential study of the affective or feeling correlates of certain colors. Their findings are of relevance to educational inquiry and even to the design of education facilities, since they suggest that there are strong "universal trends" in the attribution of affective domains to colors. A detailed review of the colors and their affective attributes is beyond our scope here, but we do feel obligated to enter one demurrer. The consistency of their "cross-cultural results" may be due not so much to the universality of the attributions under study, but rather to the instruments they used, which require subjects who could read and write! We shall return to this point below in our discussion of cognition.

Recently, Levi-Strauss has emphasized the importance of classification, and the linkages to perception are easy to see from some of his examples.

> The Hanunoo classify all forms of the local avifauna into seventy-five categories... [they] distinguish about a dozen kinds of snakes...sixty-odd types of fish...more than a dozen...types of fresh and salt water crustaceans...a similar number of...types of

> arachnids and myriapods....The thousands of insect forms present are grouped by the Hanunoo into a hundred and eight categories, including thirteen for ants and termites....Salt water mollusks...of more than sixty classes are recognized by the Hanunoo, while terrestrial and fresh water types number more than twenty-five....Four distinct types of bloodsucking leaches are distinguished...altogether 461 animal types are recorded....The acute observation of the pygmies and their awareness of the inter-relationships between the plant and animal life...is strikingly pointed out by their discussions of the living habits of bats. The tididin lives on the dry leaves of palms, the dikidik on the underside of the leaves of the wild banana, the litlit in bamboo clumps, the kolumboy in holes in trees, the konanaba in dark thickets, and so forth. In this manner, the Pinatubo Negritos can distinguish the habits of more than fifteen species of bats. Of course, the classification of bats, as well as of insects, birds, animals, fish and plants, is determined primarily by their actual physical differences and/or similarities...
>
> Even a child can frequently identify the kind of tree from which a tiny wood fragment has come and, furthermore, the sex of that tree, as defined by Kabiran notions of plant sex, by observing the appearance of its wood and bark, its smell, its hardness, and similar characteristics. Fish and shellfish by the dozen are known by individually distinctive terms, and their separate features and habits, as well as the sexual differences within each type, are well recognized (Levi-Strauss 1966).

Not only does long term exposure to environment and language affect perception, but experimental psychologists have been able to demonstrate the short-term exposure to group pressure can also bring about changes in perception. A remarkable series of experimental studies by Asch (1956), which stimulated a large number of studies of "conformity" by other social psychologists, argued that information provided by a majority of other people about the attributes of an object was frequently taken into account by observers of the object even when that information contradicted the evidence of the person's own senses. Although there is considerable evidence (e.g., Deutsch and Gerard, 1955) to suggest that some apparent "conformity" to majority perception may represent mere surface responses to emotional factors such as fear of group disapproval, it remains clear that the judgments of others are under certain conditions used as information by observers in categorizing ambiguous stimuli. Moscovici et al. (1969) and Beiner (1972), for example, have demonstrated that observers' thresholds for labelling colors can be influenced by the color judgments of others, even when the others are clearly in the minority and make judgments that are radically different from those of the experimental subject and other members of the observing groups. It is not clear from the evidence whether these effects are transitory or whether they exert long-term influence on the category boundaries of the experimental subject, but it is not difficult to infer that repeated exposure to these effects would indeed have long-term consequences.

Evidence of more indirect forms of social role influence upon perception is seen in the work of Munroe, Munroe, and Daniels, and of Herman Witkin and his colleagues. Munroe, Munroe and Daniels (1969), in a replication of an experiment by Bruner and Goodman, have shown that the size of the father's landholdings in Kenya was related to the perception by children seven to thirteen years old of the size of a series of coins. The poorer the father, the larger the child reported the size of the coin to be. The explanation given is of a relative deprivation sort: Coins are more important to children of poorer parents, and this importance is projected to perception of size. What is important here is not so much the explanation as the further evidence that social role affects perception. Socialization to certain roles in society other than social class has also been shown to have perceptual consequences. Recent studies of field dependency made in the United States (Witkin, et al., 1962) offer within-culture evidence that perceptual style correlates with social role. In the field dependency test, in which a vertical line is projected upon a shifting background, women, more often than men, are fooled into thinking the line is no longer vertical This field dependence is paralleled in the woman's role by her greater socio-emotional competence and her greater concern with others' feelings.

Further investigations into field dependency cross-culturally, including its associations with behavior and with biology as well seem especially promising. For example, Berry (1966) found field dependency differences between men and women to be culturally determined. Eskimo women are not treated as dependent; Temne men exercise strong control over their wives. Temne women show strong field dependency when compared with Temne men. Eskimo women show no differences in field dependency with Eskimo men. MacArthur (1967) replicated Berry's findings for Eskimos. Socialization into the requirements of a social role, then, can be seen as actually influencing perception which of course thereby reinforces future role learning. Irving (1970) provides additional evidence from a study of Dutch, Mexican, and U. S. Blacks that social role prescriptions affect field dependence perceptions and Wober's (1967) review of the African literature is consistent with this interpretation. The demonstrated association of perceptual skills with social role prescriptions has enormous consequences for educators in two ways: (1) showing a self-training effect; i.e., the more a person is socialized the more likely he is to be channeled to learn particular skills and less likely to learn others; (2) because of the latter, there is a built-in resistance to later learning which requires different perceptual habits; for example, in social movements whose aim is a redefinition of sex role behaviors, are men less able to learn socio-emotional roles because they are less field dependent? Are women by the same token less likely to achieve instrumental success? While one would not argue that perceptual habits can alone account for such behavior, the existence of an effect on learning is reasonably inferred from the available evidence.

By stressing the cumulative nature of the socialization experience and the concurrent blinding to other options that takes place, Endleman (1967) properly describes the process of socialization as one in which culture shows one the world, but makes one blind and deaf to worlds revealed by other perceptual skills. Adler and Harrington (1970) have applied the point of view represented by these studies from the psychological anthropology of perception in constructing their model of how political socialization takes place.

The studies above are important to educators in several respects. They demonstrate, in the first place, that the content of perception is culturally determined and culturally learned, and argue strongly against assumptions of biological differences between people of different cultures as accounting for differences in perception. Second, they suggest that certain perceptual styles, emphases, and skills--certain aspects of the perceptual process--are also culturally influenced and not biologically determined. Third, the studies can be seen to demonstrate that it is important for the student of education to understand how these cultural factors operate to influence the content and process of perception; clearly, such an understanding can be helpful to educators in a variety of ways. Finally, many of the studies provide specific information about the content and process of perception in particular cultures, and suggest research techniques whereby such information can be gained about still other cultures and subcultures, members of which are encountered by educators in their work.

Cognition

The difficulty with the study of cognition is that it cannot be studied directly because we cannot observe what actually goes on inside someone else's head. All we can study are responses to stimuli provided, inferring but not directly demonstrating the existence of cognitive structures. This particular axiom was forgotten for a while in a rush of enthusiasm over componential analysis in the late 50's and 60's, but Burling and others have more recently provided a corrective, and simple-minded equation of analytic models and psychologically "real" models (Schneider 1965) now seem to be more rare. Ardener (1971) has performed a valuable service by putting the entire problem into historical context (a history was often ignored or even denied by writers in the 60's), rehearsing the problems of the linguistic analogy upon which so much anthropological research into cognition is based, and fully dealing with the problems of the inter-determinacy of psychological reality.

Cross-cultural research in cognitive development is, of course, a large field, and one in which numbers of psychologists have worked. Indeed, of all the literature reviewed her, the perception and cognition literature is the most dominated by psychologists, and when anthropologists are included, they generally are part of an inter-disciplinary team. One of the differences between the two disciplines, psychology and anthropology, is important in understanding this literature: that the two disciplines have differing usages of the term "cross-cultural."

Put simply, for the psychologists a comparison of English and French children is called cross-cultural research; for the anthropologist, in most usages, it would not be. The anthropologist is likely to apply the term "cross-cultural research" to research that has been carried out across several cultures, and in which non-western cultures form a major group. [illegible] English-French study alluded to above would, for most anthropologists, not include sufficient representation of the world's diversity to be cross cultural, and secondly, would be interpreted as a comparative study of groups within the Western European culture area.

For the purpose of this paper, it seems most fruitful to make a detailed analysis of cognitive issues as they occur in the study of one particular aspect of cognition most relevant to educators: intelligence or intellectual functioning. Anthropology and psychology have, during the past hundred years, developed a number of assumptions about the relationship between culture and thinking which are frequently quite divergent. The assumptions in turn affect how each discipline explains apparent differences in the thinking of people of different cultures.

An anecdote sometimes told in introductory anthropology courses tells of an educational psychologist who sets out for Australia to test the intelligence of the aborigines. He expects to be able to account for their "backwardness" by showing that their intelligence is not up to standard. He arrives in Australia with IQ tests under his arm, rents a Land Rover, and sets out across the outback to find his subjects. As he drives through the desert, his Land Rover fails him. His supply of water runs low, and he sets out on foot in growing desperation; eventually he collapses in the barren land. Two passing aborigines come upon him shortly thereafter. Scooping sand not two feet from where the psychologist's head lies, they expose a spring and give him water. Revived, he signals that he is hungry, and one of the aborigines throws a stone, kills a rabbit, and feeds the psychologist.

The point of the story, of course, is that the Western educational psychologist very visibly failed an aboriginal intelligence test. Anthropologists have long taken the point of view that coping with the exigencies of the physical and social environments of any culture demands the full range of mental abilities that humans possess. As Wallace has said:

> To suppose that the "primitive" is unable to think rationally, for instance, would lead to the expectation that the primitive hunter would perform the following feat of cerebration with suicidal consequences:
>
> A rabbit has four legs
> That animal has four legs
> Therefore, that animal is a
> rabbit.

Further, the anthropologist who studies an unfamiliar culture typically has enormous difficulty mastering the intricacies of its members' daily functioning, and feels woefully ignorant and unintelligent while attempting to do so. It is not surprising, therefore, that the anthropologist can only understand the concept of "intelligence" as relating to an individual's ability to perform in a particular cutural setting. From this point of view, intelligence tests as we know them measure success at performing tasks in ways associated with a Western European lifestyle--particularly that of the American middle class.

But those from other cultures (or subcultures) who do not perform well on such culture bound tests are often labeled cognitively or culturally deprived by non-anthropologists. Psychologist George Miller (1971) says:

> Every culture has its myths. One of our most persistent is that non-literate people possess something we like to call a "primitive mentality" [because it is] different from and [therefore] inferior to our own.... The same stereotype is likely to be applied to ethnic minorities living in the West.

Anthropologists have long jousted with these twin ethnocentrisms: that cultures different from Western civilization are inferior, and that "primitive" cultures (e.g., those with hunter-gatherer economies) are the result of an inferior mentality among their members. The point of view of modern anthropologists, based on their experience with these other cultures, has emphasized the cognitive unity of mankind--which means, essentially, that thought processes (such as logic) do not differ from culture to culture. What differs, according to this doctrine, is content (what is thought about), situation (the conditions that elicit the thinking), and the premises that are accepted as true or binding. The cognitive unity idea has not always been accepted among anthropologists, however. Boas (1911) turned anthropologists away from a very different position. That earlier position, which was patterned after Darwin's and Huxley's biological propositions, posited that complex, civilized societies evolved from primitive ones in a systematic way. Furthermore, just as the young of a species presumably pass through the species' evolutionary history during embryological development, the minds of children in civilized societies also pass through primitive stages in mental development, which reflect the mental capacities and strategies of adults in primitive societies. Differences in material and religious culture, then, imply differences in thinking; primitive man was illogical or, as the French Levy-Bruhl (1923) put it, "prelogical" rather than logical, concrete rather than abstract, and so on. Current thought, as most recently formulated by Levi-Strauss, is quite different. As Cole, et al. (1971) interpret it, all men seek to make nature accessible to rational inquiry. "Both Western and non-Western strategies seek objective knowledge of the universe; both proceed by ordering, classifying, and systematizing information; both create coherent systems."

Psychologists, too, have been fascinated by evolutionary metaphors. The idea that the history of the human species can be seen in the development of civilized children enjoyed enormous popularity around the turn of the century. Furthermore, it was widely believed that primitive men had

had primitive minds. The primitive child, in one writer's summary of the literature as of 1928, was thought to be precocious until puberty, when his perspicacity came to a dead halt. This arrested mental development, as it was called, had been attributed to a variety of factors: sexual excesses and alcoholism, biological inferiority, and the culture's inability to provide the resources which make further development possible. Although the first of these explanations for assumed cognitive deficiencies has passed out of the psychological literature, the latter two--biological and cultural inferiority--remain as alternative accounts of the reasons underlying the mental deficiencies that are still assumed by some psychologists to exist among people of certain cultures. The resistance to change of this assumption is in part due to the rise to prominence of a subdiscipline within psychology which has had a continuing concern with the measurement of intellectual functioning.

The intelligence testing movement began around the turn of this century when school officials in Paris asked Alfred Binet to produce a test which would identify dull children because they could not trust teachers to make unbiased assessments. Work on existing and new intelligence tests is still going on, and many of the psychologists who have been involved with the refinements of these instruments are highly respected in the profession. The standardized tests of intelligence are now used not only to predict school and vocational performance, but also in psychodiagnostic work. Some of the basic issues involved in intelligence testing, however, remain unresolved. There is scholarly disagreement, for example, about whether the term "intelligence" should be taken as having a psychological reality--as representing some characteristic of the brain--or whether it should be taken merely as a convenient abstraction, a mathematical entity which describes certain interrelated behaviors. The second view is the more cautious and perhaps the more common one among psychologists working in this field. Some of these researchers, however, along with most laymen, do view the general factor that is common to performance on several subtests of standard intelligence tests as if it were "...a capacity [emphasis ours] for abstract reasoning and problem solving." The quote is from Arthur Jensen's controversial 1969 paper, but Jensen is far from alone in his view. For example, D. Wechsler (1944:3), who developed the most commonly used test of adult intelligence, gave this definition: "Intelligence is the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment." We should point out that Jensen and others like him who use comparisons of IQ scores of "whites and blacks" to show evidence for the genetic origins of intelligence are talking about neither intelligence nor heredity but the relationship between two cultural categories: "white and black (or Negro)" are not genetic classifications but cultural ones (Washburn 1963). IQ tests measure performance on skills in a way which successfully elicits them from members of one subculture. Therefore, the relationship shows that those a culture classes as "white" appear to do better than those classed as "black" at tasks that culture trains "whites" to do. What is truly astounding about the Jensen controversy is the relative absence of this anthropological commonplace in the criticisms that followed publication of Jensen's paper. Although Jensen's argument for heritability rests on data other than "white-Negro" comparisons, the main thrust of his paper is the failure of compensatory education programs, and we all know what that means. Intelligence, from this vantage point, is "what intelligence tests test," and it is measurable by these carefully designed standard instruments. Being measurable, it must be a quantity of something which varies from one individual to another and equally likely, from one group to another.

Note that the reification of the abstract idea "intelligence" is both subtle and easy to make; the ease with which it is accomplished can be traced to the unstated assumption that anything quantifiable and measurable must have a more-or-less physical existence. Certainly, anything we have taken so very much trouble to measure reliably and validly must exist, or else why would we have taken so much trouble with it? Furthermore, the intelligence test scores of individuals don't really change very much when they are administered repeatedly to the same individuals; they predict performance on many tasks that are very important to us, and there is evidence that scores vary less within families than among them. All these factors, along with certain politico-ideological consideration,* make the reification of the concept virtually inevitable. It is only a small step from reifying "intelligence" to viewing it as a causal factor; the lack of technological progress in a nation or culture, for example, has often been seen as caused by a deficiency in intelligence in its population. The reader will see that such a theoretical position is easily supported by comparing the intelligence test scores of a random sample of individuals drawn from their culture with a sample drawn from ours. The fact that the intelligence tests were made for our culture is easy to forget as soon as one has reified the concept they are supposed to measure.

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* A great many Americans, for example, accept as valid an ideology of opportunity which posits a causal link between high ability, working hard, and receiving high social and material rewards. People who believe that those in control of social rewards act upon this principle tend to attribute their difficulties in "getting ahead" to their own failings of ability, effort, or both. Intelligence tests and the various related aptitude tests that are replacing them in schools are generally believed to be valid indicators of ability, so that when they are used to assign pupils to different classrooms and different schools, the general view is that assignment has been fair and reasonable. It has been documented that assignment to "slow" classrooms and inferior schools contributes to inferior learning, and tends to lead eventually to placement in inferior social positions--thus perpetuating existing economic differences among subcultures whose members tend to perform differently on the tests. Those who believe that the ideology of opportunity "works" probably wish to believe also that most people have received more or less what their abilities and efforts warrant; they therefore have some stake in believing in the cross-cultural validity of the tests that are used to make school assignments. Explanations of ethnic differences in test scores form particularly striking examples of the process. As Washburn (1963) points out, "...if you look at the literature, you will find that when two groups of Whites differ in their IQ's, the explanation of the difference is immediately sought in schooling, environment, economic position of parents, and so on, but that when Negores and Whites differ in precisely the same way the difference is said to be genetic."

Once it is established that members of a given culture or subculture are intellectually "deficient," one can begin to inquire into the causes of the deficiency. Arthur Jensen and a number of others have emphasized the role of genetic differences; Phillip Vernon and others have pointed to "cultural" causes. Vernon, writing for the Toronto Symposium on Intelligence in 1969, said of cross-cultural intelligence studies:

> One can further argue that members of more backward groups are functioning mentally at Piaget's preoperational, or Bruner's enactive or iconic levels (cf. also H. Werner), and that the intellectual progress of their brighter students will approximate more to the Western type of operational and symbolic thought. Hence, it is not so unfair as might appear at first sight to test them with the kinds of tests that we apply to younger Western children. We should, though, do our best to ensure that the extrinsic, fortuitous handicaps that I have listed above are minimized--so that the testees do not fail the tests merely because they do not grasp what the problems are, or because the setting is unfamiliar or disturbing.
>
> Another cogent justification is that such peoples provide much more extreme examples of various cultural handicaps than any we are likely to meet within Western nations. Thus, we can hope to advance our knowledge of the effects of different kinds of conditions on different abilities, particularly if we apply a range of varied tests to a number of contrasted groups. Obviously the chain of

> causation will be extremely complex; one can never be sure which of many cultural conditions is responsible for any particular deficit in abilities. But as studies of this kind accumulate, our inferences will become more soundly based, and we should be able to do more to help backward peoples to progress by diagnosing the underlying causes of their retardation* [emphasis added] (Vernon 1970:108).

The first paragraph of the quotation from Professor Vernon's paper alludes to the fact that psychologists have long been aware that standard intelligence tests are "culture-bound" for a variety of reasons, most notably language differences. The response of some intelligence testers has been to design co-scalled "culture-free" or "culture-reduced" tests which do not rely upon verbal accomplishment or fact acquisition (see e.g., Cattell 1968). As Vernon has pointed out, however, the more the test-maker has succeeded in reducing cultural content, the less effectively are the tests able to predict the skills and accomplishments valued in the criterion culture; furthermore, these non-verbal tests are themselves often very much culture-bound.

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*We should emphasize that Professor Vernon is a highly regarded, thoughtful knowledgeable scholar. He is well aware of the fact that the intelligence notion has outgrown its usefulness to the psychological theoretician, that the intelligence test does not measure any single thing, that it does not measure innate or potential ability, and that it gives us no clue about the nature of the learning and reasoning processes of interest to cognitive psychologists. We have quoted extensively from his discussion to demonstrate the tenacity, even among scholars, of the assumptions that give rise to the position that "backward" societies do not progress because of the mental "deficiencies" of their members.

The psychometricians are not the only group of psychologists who have taken an interest in the study of cognitive functioning. On the contrary, cognitive psychology--the study of thinking and its development--has recently become a strong sub-discipline within psychology. It is convenient for our purposes to divide this group of researchers into two general subgroups, which differ from one another both in method of inquiry and in substantive focus. The first of these subgroups centers about the work of Jean Piaget, and its work (the reader may be surprised to learn) bears, in certain respects, a resemblance to that of the mental measurement group.

Piaget's career as a student of human development began when he worked in Binet's laboratory in Paris on the adaptation of some English reasoning tests for use with French children. His method of investigation has been, like that of the mental measurment psychologists, essentially clinical rather than experimental; it employs standardized situations about which the respondent is queried. His theoretical assumptions about the nature of intelligence are also similar to those we have ascribed to a part of the mental testing group--its essence, for Piaget, lies in the individual's ability to reason. Much of the transcultural research that has been done from Piaget's point of view has involved the standard tasks that identify, in European school children, the various stages of cognitive development that appear in Piaget's theory in a fixed sequence. For the Piagetian cognitive developmentalist who is trying to demonstrate that the sequence of mental development is in fact the same regardless of culture, the methodological strategy is perfectly obvious: One takes the standard tasks, translates them into the foreign language, and administers them to foreign children of various ages. Clement, Sistrunk and Guenther (1970) studied ratings of pattern preferences in Brazilian subjects (not tribal) and found results very similar to those previously obtained for the United States. While younger Brazilians showed more variability than comparable U. S. subjects, and the development of equivalency occurred later for Brazilians, pattern preferences were like those in the United States. This is a typical finding; i.e., the stages are validated but the non-original group is found to be "slower) [see also Bovet (1968), Heron and Dowel (1973)]. Dasen (1972) summarizes the "cross cultural" research on Piagetian theory and concludes that the stage theories are verified in most cases, but that the rate of operational development is affected by cultural factors; sometimes, in fact, the concrete operational stage is said not to be reached at all. It is not surprising that one of the things that is commonly reported in these studies is the extent to which the foreign children lag behind European children in age as they move from one developmental stage to another. The parallels between this kind of report and those of cross-cultural intelligence testers are too obvious to detail. The fact that Piaget's theory of the development of mental functioning is biological and, in a certain sense, genetic in nature, adds somewhat to the contribution of this cross-cultural work to the longevity of the "primitive mentality" idea.

Lombardi (1969) sought to investigate the psycholinguistic abilities of Papago Indian school children on the ITPA (Illinois Test of Psycholinguistic Abilities) and found the Papagos to perform significantly lower than the standardized population children on psycholinguistic abilities. The author concludes "a greater emphasis should be placed on remediating the Papago's psycholinguistic abilities and fostering language development before the children enter first grade [!]" and that teachers have not recognized fully enough that they are dealing with children with learning disabilities. Clearly, in this literature when a culture doesn't shape up to Western European norm, remediation is indicated. Kuske (1970) did for the Sioux what Lombardi had done for the Papago, and limiting ourselves to his comparison of "non-mentally handicapped" Sioux with the ITPA normative population, he found the Sioux children's performance significantly inferior on most profiles. St. George (1970) found that Maori have ITPA scores significantly lower than European children, which places them in the same category with the Sioux and Papago as reported above, but he accounted for the difference by emphasizing that "culturally" the European children have "more in common" with the world of the school. Irvine (1969) reviewed experiments involving Ss from various groups in Africa and Great Britain on tests of reasoning (Raven's Progressive Matrices). He concluded that test scores approach Western patterns as groups adopt Western value systems. DeLacey administered classification tests based on the work of Piaget and Inhelder to aborigines with and without extensive contact with European culture, and to European children living in Australia. A small sub-sample of high-contact aborigines performed on a par with the European children, but the others did not. Lloyd (1971) compared children from elite (educated) westernized and educated parents did better on the Stanford-Binet than the traditional students. The difficulty with all these findings, of course, is that they are subject to self-selection explanations, and that chicken-and-egg problems abound in them. However, they emphasize the role of culture and familiarity with tasks being elicited, but explanations are too often *post hoc*.

The trend of findings is not all in one direction. McManus (1970) found similarities between pre-school children from St. Maarten (Netherlands West Indies) and the United States, and argued that a similarity in problem-solving mediational processes in children from different cultures accounts for the similarities. This too is a typical kind of explanation: All cultures must cope with similar problems. Young *et al*. (1970), comparing "Eskimo" students at Barrow Alaska, with "Caucasian" children at Pullman, Washington, finds similar relationships for both groups between reading performance, achievement test performance (California Achievement Test) and eyesight (refractive error). It is interesting to note that the more myopic Ss tended to score *higher* on reading and achievement tests. Here we see a study illuminating how physical disabilities have similar effects "cross culturally." El-Abd (1970) reports an experiment showing that East African students' mental abilities are no different from those of students in the West in flexibility of closure, spatial orientation, verbal comprehension, and word fluency. However, note that the subjects were all boys who had obtained their Higher School Certificate or were now University undergraduates!

The other subgroup of cognitive psychologists has been working in very different ways than have those discussed above. They begin with very different assumptions about intellectual functioning. The research method of choice has been experimental in large part, with emphasis on discovering the nature of the strategies that people use to solve various kinds of simple and more complex problems. Let us illustrate. Suppose, for example, we are told that John is taller than Mary, and that Mary is in turn taller than Bill. When asked whether John or Bill is taller we, like most American adults, immediately choose John. The question of interest is this: How have we gone about making the correct choice; that is, how do we actually think when we solve this simple problem? (After all, even those of us who are not familiar with the formal mathematics of inequalities, or with formal logic, can solve it easily.) Now suppose our speculation (like that of cognitive psychologist Clinton DeSoto) is that we solve this kind of problem by translating the "taller than" relations into spatial images which in our mind's eye we compare with one another. We may imagine a line for John which is longer than the line for Mary, and a line for Bill which is shorter than the line which represents Mary's tallness. In this view, we compare the John spatial image with the Bill spatial image and the correct answer is directly obvious. Next we must find a way of demonstrating that our speculation is correct. Our task is to design an experiment whose outcome bears upon the correctness or incorrectness of our position. Often such an experiment consists of posing the problem to respondents in different forms, such that some of the forms would seem likely to interfere with a spatial image method of solving it, and some would not. If there emerged differences among the forms of presentation in the speed or accuracy with which respondents solved the problems, then our speculation would have received support.

Experimental cognitive developmentalists often utilize such research tactics. Many of the theoretical ideas have been influenced by linguistics and psycholinguistics, and they often look for relationships between the development of language and thinking strategies in the child. Their experiments, therefore, are frequently designed to demonstrate aspects of this assumed relationship. (Readers may be reminded by this of the Edward Sapir-Benjamin Lee Whorf proposition which linked the structure of thinking with the structure of language and the attempts during the 1950's to develop empirical evidence relevant to this proposition using as experimental subjects native speakers of different languages.) We wish to point out that the experimental psychologists who study thinking, although they have been stimulated and influenced by the work of Piaget and his followers, have not generally made hierarchical assumptions like those of Piaget and others about the development of cognitive functioning. They are more likely to suggest that so little is known at present about the nature of thinking that grand theories about how thinking develops are premature. The experimental tasks which they use in their research are single-purpose--invented for a particular experiment or series of experiments--and there is no temptation to turn the tasks into standard tests of the adequacy in some person or group of one or another kind of mental functioning. It is this methodological style that has been adopted by Cole _et al_. (1971) in their study of learning and thinking among members of a non-Western cultural group.

Theirs was the fortunate combination of anthropological commitments and methods with the experimental techniques of cognitive psychology that led to the uncovering of new evidence relating to cultural differences in thinking. The position that the new evidence points to is, for most psychologists, quite radical; instead of explaining why cultural differences in cognitive strategies (or mental deficiencies) exist. it calls into question the assumption that the differences exist in the first place.

Cole, Gay, Glick and Sharp (1971) follow what they call the "common sense dictum" that people's skills at tasks will differ with the culture's emphasis on such tasks, and argue that these "tests and experiments [are] specially contrived occasions for the manifestation of cognitive skills.... Failure to becomes not an illustration of cultural inferiority [but rather evidence that the skills] are available but for some reason the content [of the tests] does not trigger their use."

The focus of their effort was on the Kpelle people of central Liberia, a tribal group which numbers about 250,000. Liberia was founded early in the 19th century as a haven for freed American slaves; its official language is English, and many of its institutions, includings its schools, are American in origin and character. Contact between Americo-Liberians and the Kpelle people was fairly simpy until World War II. Since then, a network of roads has been built into Kpelle-land, and many Kpelle have abandoned traditional ways and become part of the national economy. The Kpelle, therefore, are a people in transition. Villages remote from the roads have remained more or less traditional, with upland rice agriculture as the primary basis of sustenance. Closer to or on the roads, transition villages exist in which traditional and non-traditional Kpelle live side by side. Non-traditional

Kpelle are also found in urban centers. Many have graduated from high school and have attended college. Kpelle school children are generally held in the first grade until they have mastered enough of the curriculum to continue; their average age in the first grade is nine and in the second grade twelve. (This fact occasions a methodological digression. While students of learning and thinking have increasingly felt that cross-cultural research was necessary in order that their developmental theory not be culture bound, they have more frequently failed to do anything to make their own research truly cross cultural. The present research avoids the chief pitfall of much earlier research--uncontrolled comparison. Since the average age of second-grade children is twelve and of first-grade children nine, cross-cultural comparisons which assume the same relationship between age and education in both cultures would be meaningless. But by comparing within the Kpelle groups, Cole, et al., are able to investigate the effect of various factors without intercultural confounding.) The dominant teaching style is rote learning of a set sequence of facts. Many children drop out of school after the fourth grade, and most by the seventh grade, for economic, social, or academic reasons. Many children, particularly in the remote areas, do not attend school at all.

It is important to understand what "school" means in this cultural setting.

> The curriculum in the Liberian school is set by the Department of Education and follows very closely the pattern of American schools. Textbooks are almost always American, either castoffs or new books, and their content is at best marginally relevant to the Kpelle child's world. [Since] national

> examinations...determine the content of instruction...the students greatly resent a teacher straying from the specific material upon which they will be examined... The teacher speaks one variety of Liberian English, children speak [other] varieties and the textbooks are written in standard [American] English.

Such practices sometimes lead to absurd extremes:

> A child who was asked to recite the multiplication tables for his teacher began "la-di-da-di-da, la-di-da-di-da," at which point the teacher interrupted to ask him what he was saying. He responded that he knew the tune but he did not yet know the words.

When the child graduates from the sixth grade, he takes a national examination which decides if he may continue his education, usually away from home, and, therefore, from the traditional culture. Although Cole, et al. do not make much of this, through these restrictions the school system effectively creates national elites. The break with traditional culture tends to occur among school children if they continue their education beyond the sixth grade. Thus, Kpelle children and adults can be divided by age, literacy, life-style, degree of education, and urbanization, so that the effects of all these factors can be studied without leaving the group of people under study. The fact the decision to continue or not continue in school is most frequently a non-academic one makes differences due to amount of schooling easier to interpret.

Cole and his colleagues present a brief ethnography of the Kpelle which provided them with some clues (there could be more for the reader) about what to look for in the investigation of complex forms of Kpelle thinking, and where to look for it. The ethnography also makes clear that asking the traditional adult Kpelle questions is a rather tricky business, since knowledge is considered a source of power and prestige and secrecy is an important factor in daily life; asking someone how he knows the answer to a question can be tantamount to asking him to reveal the secret sources of his information, which he may not do. Traditional Kpelle value clever speech and argumentative skills very highly, and exercise them in presenting and judging disputes in informal and formal settings. Although the authors have reported a court case in one of the later chapters as an example of the use of evidence and logic among the traditional Kpelle, most of the study is experimental rather than observational in method, and this may disappoint some anthropologists.

More than sixty studies, in which more than 3,300 persons participated, are reported by the authors, including several which, for various comparative purposes, use as subjects non-Kpelle persons (American school children, Vai adults, and Yucatec Mayan adults). Some of the experiments are concerned with effects of the demographic factors we have described (education, age, etc.), and some with the effects of stimulus characteristics, methods of presentation, and so on. Many of the studies investigate both demographic and other factors simultaneously, in order to detect interactions between them. The studies are concerned with a wide variety of topics within three broad categories: classification of objects, learning and memory, and logic and inference. What is perhaps the most important aspect of these studies is that they were conducted and are reported in series, with the first exploratory study on a problem leading to other studies, sometimes quite a number of them. The approach can be illustrated with a set of experiments on memory, which we believe is important for a number of reasons.

The authors began with a free recall task which was administered to nonliterate and educated Kpelle subjects of three age ranges: six- to eight-year olds, ten- to fourteen-year olds, and adults. Half of the subjects in each group worked with a list of twenty objects that was clusterable into categories of objects (utensils, tools, clothing, and food) and half worked with a similar list that was not clusterable. The experimenter read the list of items to be recalled at a rate of two seconds per item, and then the subject was asked to recall the list. Each subject received the same list five times, each time in a different order. Various measures of performance were used: the number of correctly recalled items, the subjects' tendency to recall the items in the order they had been presented, and the tendency to recall items in clusters (in the case of the clusterable list); the tendency for subjects to recall an item as a function of its serial position in the list was also calculated. The results of the experiment were very puzzling. Recall was not high. It increased slightly with age and education and was slightly greater for the clusterable list, but there was only a slight improvement over the five trials; and unlike the results of corresponding studies done in the United States and similar cultures, there was no relation between the serial position of the word and the recall accuracy associated with it. Furthermore, there was no tendency for subjects to recall clusterable lists in clusters--a result very different from what has been obtained with American or European subjects.

In order to discover whether the relatively poor performances of subjects in the first study was due to the fact that they had to remember lists of words, the authors repeated and extended a portion of the first experiment. Only the clusterable list was used; half the subjects recalled the words as before, and half were silently shown the objects the words named. Further, for half the verbal group and half the object group, the clusterable stimuli were presented next to one another in the list--food items together, tools together, etc. The remaining subjects received the stimuli in random order as in the first study. Ten- to fourteen-year old literate and nonliterate boys were used as subjects. Again results were markedly different from typical American data. Memory was poor in terms of the number of items recalled, and there was little improvement with successive trials. Recall of the items in clusters appeared only when they were presented as objects with the same category items juxtaposed. In this experiment, no differences emerged between educated and nonliterate subjects in total amount recalled, but the educated subjects did manifest a serial-position effect similar to that of American subjects.

Obviously, many factors could have been controlling this exceedingly complex pattern of results. So the authors began to conduct studies to see what was happening, and more particularly, to try to isolate the conditions under which Kpelle subjects would in fact behave like American subjects in the way they recalled lists of words. They began by doing the earlier experiments, using similarly developed lists, with American subjects (as well as with Mexican Indian and Vai subjects). The Americans showed an orderly development of free recall learning; by the third grade, they did as well as the Kpelle groups, and older subjects performed far better in amount recalled and with the expected organizational pattern. Why were the Kpelle subjects not improving with trials, and not remembering in clusters? One set of hypotheses was motivational in character: Perhaps one needs to have several years of schooling before free recall begins to be organized in the way it is among Americans. Still other hypotheses led to experiments which varied the way the tasks were presented.

Two experiments were then conducted with Kpelle subjects, in which money was offered as incentive for good recall performance. The results were exactly parallel to those in the earlier experiments. Then urban Kpelle were compared with traditional Kpelle: The former group performed slightly better, but in essence not differently. Then Kpelle high school students were compared with nonliterate age mates in two further studies. The high school group performed much better, and, in fact, performed in ways that were similar to the performances of Americans. Now the authors clearly had a different problem: What influences good recall? To suggest that "schooling" does is, of course, uninformative. Schooling consists, after all, of a great many things. Always mindful of the anthropologist's faith that people everywhere have similar cognitive abilities, the authors phrased their question in this way: "Are there circumstances under which nonliterate, traditional people will manifest some or all of the organizational features of recall produced by the Kpelle high school students and older American groups?"

When they discovered that asking subjects to place the items in a bucket or to sort them into cups had a large effect on both recall and clustering, the authors turned to the work of psychologist George Mandler for their next clues. Mandler points out that remembering involves retrieval as well as storage, and that a rememberer must have retrieval cues in order to recall material. In a new experiment, the authors held the objects presented for recall over four chairs, so that each item was said to "belong to" a particular chair. Both objects and words were used (objects held silently for a couple of seconds over the chair to which they "belonged"). For half the subjects, a rule was followed such that all the items that belong to the same categories were associated with a particular chair, and for the other half, the association of item to chair was random. Both literate and nonliterate traditional ten- to fourteen-year olds served as subjects. For both groups, presenting the items in category groupings with the chairs produced data that were very much like American data; recall improved dramatically with trials, and showed strong clustering effects. There then followed a long series of studies. In one of them, which varied the method of persentation and the number of chairs, all experimental conditions produced high recall rates, learning rates, and near-perfect clustering. The authors concluded from this study and others that experimenter differences sometimes have strong effects on recall. The point of the chairs, of course, is that they seemed to serve as retrieval cues for these subjects. It appears that one of the effects of substantial schooling is to train students to use single words as retrieval cues for other words; for nonliterate Kpelle, the retrieval function was served by material objects. The next series of studies investigated among Americans as well as Kpelle the effects of various kinds of verbal cueing for recall. Then the word lists were embedded (in still another group of studies) in narrative stories. The way the words were recalled matched the way in which they were structured in the story.

These studies are by no means complete--they do not solve the puzzles to the complete satisfaction of the authors or other investigators. But, in addition to making some contributions to the general literature on the organization of recall of this kind, they show with great clarity that the nonliterate "primitives" being studied are not intrinsically different from literate Americans in the way they remember. What is striking is that the first few studies were unanimous in suggesting that such differences did indeed exist. It was only the perseverance, faith, and energy of this group of investigators that finally exposed the easy assumptions they might have made about these apparent differences.

Such instances appear several times in the book. Some Kpelle children and adults, for instance, seem to have trouble dealing with certain kinds of apparently simple verbal logic problems, for example:

> "Flumo and Yakpalo always drink cane juice [rum] together. Flumo is drinking cane juice. Is Yakpalo drinking cane juice?" One subject answered "Flumo and Yakpalo drink cane juice together, but the time Flumo was drinking the first one Yakpalo was not there on that day."

Many subjects did not respond to the logical relations contained in the verbal problems, but responded to other things instead. However, when given such problems in groups rather than individually, subjects seemed to have very little difficulty with them; for example:

> "Everyone in the town eats rice. The chief is in the town; therefore, the chief eats rice." The answer was, "Yes, it is true because it is said that everyone in the town eats rice. The chief is included in that number."

The authors' report on Kpelle logical thinking during a court case also makes clear that traditional Kpelle use evidence, make inferences, and test conclusions just as we do. Furthermore, a report of the details of play of a highly complex game (similar in some ways to the Japanese game of Go) suggests that good players are fine logical strategists. What is impressive is that the authors did not stop working until they had at least begun to uncover conditions under which their subjects' intellective processing is similar to that of Americans and Europeans. This research strategy is particularly striking when contrasted to that of the cross-cultural intelligence testers, who simply take their homegrown testing kits to the other culture, administer the tests, and report the results: The others are not as smart as we are.

The Cole, et al., research is meticulous. Further, it is generally bound to some portion of the recent research literature in psychology, and frequently makes contributions to that literature. We must point out, for all our enthusiasm, that the book has many minor flaws. Experimental procedures are sometimes incompletely described, the numbers of subjects run are often omitted, the tables are frequently poorly labeled, and the data are often only skimpily analyzed; one gets the impression that there is much in this material that remains untapped. In addition, experiments and interpretations of results that are reported are frequently difficult to follow, of simply unsatisfying. The reader is left with the impression that some of the studies were designed without much forethought; the connections among experiments are sometimes rather unclear. Finally, the admittedly unorthodox ethnography is inadequate. The authors did not fully do what they set out to do: to use the ethnography as a guide to experimentation. Too often a standard experimental task is initially given to subjects, and the ethnography is used to explain the results and to think of other possible experiments. Further, the ethnography presented in the book is largely limited to information which the authors use later on in their analyses. This deprives the reader of additional material with which he might be able to construct his own alternative explanations (a hallmark of good ethnography).

The major implication of the work, however, is crucial, speaking to the questions of so-called "cultural inferiority" and "cultural deprivation" which are bandied about so frequently by scholars, educators, and laymen alike. It is possible, and even likely, that the idea of cultural deprivation is a consequence of our misunderstanding, our ignorance, of the way the culture (or subculture) works with respect to the intellectual functioning of its members. In typically ethnocentric fashion, we condemn without expending the energy necessary to understand; our immediate impulse is to strike down these cultural differences, and substitute ours for theirs, as if an instrument had no effect and simply "measured intelligence."

The issues raised by studies reviewed here are of direct concern to educators who desire to understand how learning goes on and how it can be measured. The results are therefore providing an ever deepending foundation for the study of socialization, to which we now turn.

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II. Socialization

The person approaching the study of socialization for the first time enters a superficially simple but actually quite complicated set of theoretical and methodological problems. It is easier to assert that the socialization process is a prerequisite of social life than it is to study it and substantiate how it occurs. The biggest problem is, of course, that while our science has acquired the belief "the child is father to the man"; studies which actually study the same adults when they were children (longitudinal studies) are as extremely expensive as they are extremely rare. In psychology Kagan and Moss (1961) report on the best known attempt, the Fels study, but generally the field of socialization does not rely on fullscale longitudinal studies to demonstrate its basic assumption as much as it relies on common sense belief.

The study of socialization is necessary only to the degree that we believe there is some usefulness in the idea that what happens to an individual when he is a child affects what he does as an adult. Not all behaviors may require this approach, some are "situation specific" and do not obviously require appeal to explanations dealing with personality of individual actors. However, the studies reviewed here aim to assess the usefullness of the socialization approach to various problems of relevance to education.

Some Factors in Socialization

John Honigmann's (1967) "assumption of cumulative influence" stresses the continuous character of a person's life and that prior events influence and limit what a person later becomes. Clearly, however, not all experiences are equally potent predictors of later behavior. Therefore one job for a theory of socialization is to specify (or discover) which experiences are critical and which are not. As one might expect there are various theories of socialization, and each can offer us different accounts of which experiences are more crucial than others. We will return to this below.

The timing of experiences can have an effect independent of the experience itself, and this introduces a variable of order (development) and age. At its most obvious, a lecture on human rights can be expected to have greater impact (so far as a lecture can ever have an impact) on a 13-year old than on a 13-day old. It follows from this that certain learning depends upon the development of the child's ability to learn, and that learning of certain behaviors of processes may occur only if the child has acquired a prior skill or knowledge. Certain ages may be critical for the learning of certain skills, and learning may accelerate at certain ages. A corollary of these points is that what has been learned at any given point can determine (e.g., by screening out certain new ideas) what learning will follow. Thus the processes of perceptual development reviewed above are an important part of socialization (see Adler and Harrinton 1970: 16ff) for an explicit use of perception in a socialization model). As we learn to cope appropriately with the options available to us in one culture, we can lose sight of or lose the ability to conceptualize options that cannot be in our own society.

The dimension of time is another factor is socialization. Rautman and Bower (1951) report on a replication of a study done by the same investigators in 1943. The results showed that there was definitely less preoccupation with war themes in 1950 than in 1943. Analysis of the children's TAT story endings showed that the 1950 sample was more inclined to give happy endings than was the 1943 sample. Cultural differences are gross exaggerations of such historical effects of time within a culture. Culture changes not only the content of what is learned, but beliefs and values, and the ordering of learning itself.

The study of socialization is more than the study of how individuals learn particular ways of life but it is basic to our understanding of how societies perpetuate themselves by making particular kinds of humans as opposed to others. This is why the study of socialization is not concerned (as is some of psychology) with the learning of behavior idiosyncratic to an individual, but rather those behaviors which are meaningful to other members of a society, i.e., part of the social process. Socialization then is here conceptualized not as a filling of an empty vessel with a pre-set picture of a society but a dynamic process by which individuals learn to structure reality in ways which enable them to properly sort out and make sense of the diversity of stimuli which form his environment, and behave in ways congruent with others' expectations of them in the social process. Because a complete "description" of a society is probably never possible, students of socialization processes have found it increasingly necessary to delimit the field of what is being learned, and rather than studying socialization in general, to study socialization of particular kinds of role behaviors, e.g., sex role socialization, and religious socialization.

Students of the socialization process use concepts of personality to show how this knowledge is required. Their further commitment is to show how a society induces its members *willingly* to accept these responsibilities. The question becomes one of the integration of society. As Schwartz and Merten (1968:1120) have phrased it: "How does a society make its members feel that the status they eventually must occupy is desirable as well as inevitable?" Relevant, then, are accurate descriptions of social structure, the interaction of individuals and groups, variations and cycles within groups, and the choices available to actors at various structural positions. The study of socialization process and personality as thus described has been over the years a major concern of psychological anthropology, and the literature to be reviewed here is immense.

Psychological anthropology emerged from a subfield of anthropology called "culture and personality." The main theoretical difference between the old label and the new, as well as between work done, say, prior to 1955 and work done more recently, is reflected in the difference between two concepts, coined by Wallace in 1961, "replication of uniformity" and "organization of diversity." Wallace argued that works which assumed that the process of socialization was the accomplishment of the replication of culture in the individual personality, with the corollary that each member of a culture was a uniform replication of every other, were elevating a tautology to the level of theory. Was personality really culture writ small? Was culture really personality writ large? Various theorists tried to obviate the necessity for replication of uniformity assumptions, and the search was heightened as anthropologists worked in increasingly complex societies. Kardiner and Linton's "basic personality type: (Kardiner 1939) was an effort to provide a theoretical understanding that certain basics were shared (read replicated) in every member of a culture, with individual differences emerging from "fringes" around the basics. DuBois' model personality was an effort to provide a statistical description of a central tendency around which a culture's members could vary. However, by the 60's these adjustments had become stretched to the point where something better was needed. This is not to suggest that, e.g., Kardiner and Linton's models did not continue to exert an effect. Indeed the Whiting model of socialization discussed below is in other respects a direct descendant from the Kardiner model. However, by the 60's the field had become more conscicus of and more interested in within culture variations, and a recognition that "personality" and "cognitive map" were concepts which, while relatable to culture, were not synonymous with it.

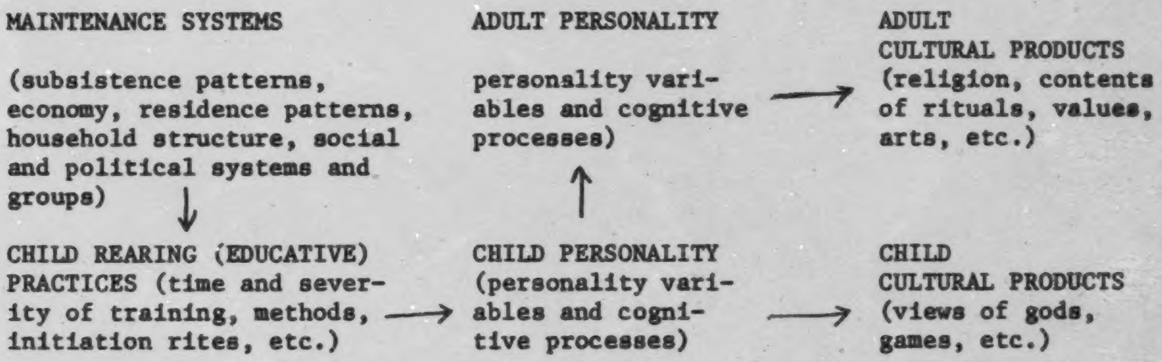
This led to Wallace's conceptualization of culture as the organization of diversity (of individual personalities). In this conceptualization behavioral expectations are shared, and the personality or cognitive map which produces individual behaviors is acknowledged as diverse (and while not for Wallace, for us potentially unknowable----see above). This does not prevent the theorist from theorizing that people behave as they do because of a particular personality variable. It emphasizes that the test of the theory is how well that behavior is predicted, and that a successful prediction does not mean that all those behaving in a particular way are behaving in that way for the personality reason given. This conceptualization is responsive to our discussion of cognition above. This kind of theoretical conceptualization inevitably led to more statistical kinds of analyses, more careful data gathering, and the greater methodological rigor that come to characterize the field of psychological anthropology throughout the sixties into the present.

Whiting's Model

The anthropological model of socialization most relevant to educational inquiry explicates that position that education is embedded in a sociocultural matrix and is therefore integral to the study of the integration of society. The mode of education, or child training practices in Whiting's model, is seen as arising in any particular culture setting, from the maintenance systems of the particular culture. To say this is to emphasize two points: 1) that any study of "education" which does not take into account its cultural context is incomplete, and 2) that since maintenance systems give rise to education more than vice-versa, educational systems are not a useful point to initiate change. This point becomes crucial in an examination of much of the recent literature on education. To criticize the schools for their failures, and to demand change, overlooks the functions and interrelationships that the schools serve and have within the larger society. This is not to say that abuses in schools cannot be corrected or that reform is impossible. It is to say that for change to occur (as opposed to reform) a change in the society (maintenance systems) is prerequisite to change in educational structures. Wallace's widely known 1961 article makes a similar point to Whiting's model by emphasizing that the goal of schools will be different in what he calls conservative, reactionary and revolutionary societies, in which the type of society determines the type of schooling and not vice-versa. The advantage of Whiting's formulation for educators is that it includes all education, not just schooling, in its scope. Thus, John Herzog (1962) was able to show that the type of instruction (whether deliberate or not, whether done by kin or not) varied by household type and type of society. This study provides empirical support for two points: (1) that type of education is determined by type of society and (2) that types (i.e., deliberate instruction) must be considered in the total context of child training practices of a society and not as synonymous with them.

The Whiting Model

Figure 1


MAINTENANCE SYSTEMS
(subsistence patterns, economy, residence patterns, household structure, social and political systems and groups)
ADULT PERSONALITY
personality variables and cognitive processes)
ADULT CULTURAL PRODUCTS
(religion, contents of rituals, values, arts, etc.)
CHILD REARING (EDUCATIVE) PRACTICES (time and severity of training, methods, initiation rites, etc.)
CHILD PERSONALITY
(personality variables and cognitive processes)
CHILD CULTURAL PRODUCTS
(views of gods, games, etc.)

Maintenance systems are described by Whiting and Child as the "economic, political, and social organizations of a society surrounding the nourishment, sheltering and protection of its members." From structual anthropology (both the British and American Version) come working models and actual descriptions of maintenance systems. Examples of maintenance systems from the following sections include household composition, sexual division of labor, and residence patterns. Child Training Practices, in the broadest sense, are what is done to the child to bring about the behavior necessary for social life. In the term child training is implicit some intent on the part of the parent or surrogate, and some goal presumably defined by the culture. Schools, the fact that initial child training is done by women, and initiation rites, are examples of child training practices. Personality is the model of what the individual assimilates and of how he organizes what happens to him. In a sense, "personality" may be conceptualized as an individual's adaptation to his socialization. Here the study of socialization depends upon psychological anthropologists and through them, upon the field of psychology itself, so that personality can be expressed in terms of measured variables. Such a personality variable is sex identity. Cultural Products include religion, cultural values, art, games, or any other cultural features not immediately and practically involved in the satisfaction of basic biological needs. In the study of male initiation rites the value of male solidarity would be an example, as well as the symbolic content of the initiation rites themselves.

While many psychological anthropologists would argue over fine points, most would agree that education can only be studied as part of an overall socialization process designed to meet goals specific to the culture examined. We have arbitrarily chosen to order the relevant studies of childhood socialization in terms of the progression from infancy to later childhood, beginning, therefore, with those studies related to the treatment of infants. These provide basic data for early learning specialists. As the model suggests, our review will focus on two main factors: (1) antecedents of child training practices and (2) consequences of them.

Infancy

Values, symbols and religious systems from Durkheim onward have been recognized as reflecting social life. Here, the relationship between such systems and child training is explored. For a long time psychologists, particularly those of Freudian persuasion, have assumed that the nature of the gods and their relation to man is a reflection or projection of the child's parental image and, hence, predictable from the relation between parent and child during infancy and early childhood. Several cross-cultural studies have attempted to put this hypothesis to the test (Spiro and D'Andrade 1958; Lambert, Triandis and Wolf 1959; and Whiting 1959a). Each of these studies tends to support the general hypothesis that harsh parental treatment during infancy leads to the cultural belief that the spirit world is harsh and aggressive. Spiro and D'Andrade (1958), using the Whiting and Child (1953) "initial satisfaction of dependence" as a score for estimating the degree to which infants are indulged, found that societies that were judged to be relatively high on the above score tended to believe that the behavior of the gods was contingent upon the behavior of humans and that gods could be controlled by the performance of compulsive rituals. Such societies did not propritiate the gods. The authors argue that the adult's treatment of the gods is, therefore, a reflection of an infant's relation to his parents. In other words, infants who are treated indulgently by their parents, that is, whose parents respond to them when they cry or show discomfort, when they grow up feel they can be equally successful in controlling the supernaturals. Lambert, Triandis, and Wolf (1959) used a score taken from Barry, Bacon and Child (1957) for estimating the relation between the infant and his caretakers, consisting of a judgment of the degree to which they treated him harshly or painfully. They found that societies in which infants were treated painfully believed in gods which were judged to be more aggressive than benevolent toward human beings. Again the gods seem to reflect the parental treatment of infants. Finally, Whiting (1959a), using still a different score for infant indulgence, reports a finding consistent with this hypothesis. The score in this study was also from Barry, Bacon, and Child (1957) and was an over-all judgment of the degree to which an infant was indulged by his caretakers. It was reported that societies high in the over-all indulgence of infants tended not to fear ghosts at funerals. The assumption here is that funeral ghosts are, like the gods in the previous studies, a projection of the parental image. Invoking a personality link other than"projection," Hamer (1969) reports that the Potawatomi Indians reinforce dependent behavior through highly nurturant treatment of infants then reinforce independent, seclusive behavior, resulting in high dependency needs coupled with a fear they will not be met. He argues that dependency needs used to *be met* by internalizing a guardian spirit who becomes responsible for one's actions, but in recent times alcohol has provided the means for *expressing* dependency, an example of what happens when the fit between infancy needs and religion disintegrates.

The next problem is to discover whether or not there is any relationship between social structure of a culture and the degree to which infants are indulged. It was suggested by Murdock and Whiting (1951) that the economic and ceremonial duties of the mother might have some bearing on the amount of time she could spend in caring for her child, and tentative results based on a samll number of cases tended to confirm this hypothesis. They report (pp. 33-35) that societies in which mothers have few economic responsibilities and are little involved in the life of the tribe tend to be more indulgent with their infants than in societies where mothers have such responsibilities. They also reported that there was a tendency for large extended families where there were many hands to care for the infant to treat him more indulgently. Murdock (1957), however, published judgments on the family and household structure for a large number of societies. Using them, Whiting (1961) found that the degree of infant indulgence is roughly proportional to the number of adults living in the household. Munroe and Munroe (n.d.) investigated whether this effect is present within a single culture as well as across cultures. Working with a small sample (12) in an East African society they visited households and noted (1) whether or not children were being held by someone and (2) how long it took for someone to comfort children after they started to cry. Using these as measures of indulgence, even with such small numbers, they found that children were significantly more often held and more promptly attended to in large households than in small.

Minturn and Lambert (1964) found for a sample of 76 societies and in an analysis of the Six Culture Study data that "mothers spend less time with children when other women were available to help." According to the Six Cultures Study data, mothers may become unstable when forced to spend long periods of time in caring for their children without help; maternal stability also seems definitely related to the number of children she must care for. Since lack of maternal warmth is also associated with responsibility for a large number of children, there may be an interaction of maternal stability and warmth, with optimal conditions for both being a limited number of children, to care for and in the presence of some help in the household like a grandparent, but not too many caretakers, for mothers without privacy in the raising of their children, they found, are relatively muted in their emotional expression to the child when compared with mothers with more privacy.

In another study of the treatment of infants, Whiting et al. (1958) found that in most societies over the world infants sleep in the same bed or on the same sleeping mat with their mothers. Even where an infant has a cradle or cot of his own, this is generally placed next to the mother's bed within easy reach. The sleeping distance between a mother with her nursing infant and her husband, however, is more varied. In slightly over half of the societies of the world the husband sleeps either in a bed in the same room, but at some distance from his wife, or in another room. This might be called an exclusive mother-infant sleeping arrangment. These in turn are related to the presence of polygyny (Whiting 1964). Whiting, Kluckhohn and Anthony hypothesized that such sleeping arrangements would indicate a strong identification of the child with the mother.

Barry and Paxson (1971) present new codes on 186 societies on such variables as sleeping proximity, bodily restrictiveness, bodily contact, carrying technique, crying, pain infliction, post-partum sex taboos, special procedures, new foods, weaning, motor skills, autonomy, elimination control, covering of genitals, non-maternal relationships, role of father, principle relationships and indulgence of infants. Their paper also routinely reports intercorrelations among the variables coded. Barry and Roberts (1972) use those codes for a study of infant socialization and games of chance. They conceptualize games of chance as an expression of infantile dependence and social isolation during infancy (e.g., early modesty training), coupled with later emphasis on responsibility and obedience. They relate their findings to a motivational explanation of compulsive gambling in our own society.

A series of experiemnts showing that animals stressed during infancy subsequently grew more rapidly and eventually attained greater skeletal length than an unstressed control group, led to two cross-cultural studies on a sample of societies in each major area of the world (Landauer and Whiting 1964; Gunders and Whiting 1964). The hypothesis was apparently confirmed. Adult males were on the average two inches taller in societies having stress inducers in infancy than societies not having such practices. This association was statistically independent of differences in climate, mode of subsistence, estimated diet and race. One of the growth-correlated stress-inducers in the cross-cultural studies was vaccination (see Landauer 1973) or inoculation for smallpox or other diseases, which is believed to cause a stress response through its systematic involvement in immune reactions and their side effects. Subsequently, the relation between infantile immunization and adult stature was studied by reanalyzing data from the Fels study and Berkeley longitudinal studies of child development (Whiting and Landauer 1968). Again a positive correlation was found between early immunization and terminal stature, this time with parental height controlled statistically.

Turning from biological to socio-cultural consequences of stress in infancy, Ayres has found (1968) a relationship between stress and kinds of music. Infant stress leads to a wider range of styles of singing and polyphony; no stress, to monotonic singing. Ayres (1973) deals with one aspect of music, rhythm. It presents and tests the hypothesis that cross-cultural variation in rhythm is related to variation in infant carrying practices. It answers questions concerning the psychological origin of rhythm and suggests an explanation for the function and importance of music in human experience. The hypothesis investigated in this study predicts that cross-cultural variation in the frequency and importance of regular rhythm in music will be related to variation in early somatosensory stimulation derived from body contact with the mother or other care takers. The extent and nature of such stimulation varies from one society to another depending upon the frequency and manner in which infants are held and carried. This formulation assumes that regular rhythm in music is modeled on the sensation of regular up-and-down or side-to-side motion, which the infant experiences while being carried. Reinforcement theory suggests that the more such sensations are associated with rewards derived from contact, feeding, and temperature maintenance, the greater will be the required reward value of regular rhythm, that is, its ability to evoke feelings of relaxation and pleasure. Societies in which infants are carried, either in the mother's arms or in a sling or shawl, have higher scores on regular rhythm than societies in which infants are kept in bassinets, cradleboards, or cradles. The findings suggest that a major psychological function of rhythm is to promote feelings of security and satisfaction and to reduce anxiety and tension through an unconscious association with pleasurable early experience, a finding rife with educational implications.

Further cross-cultural research on infancy is indicated since it is now generally conceded that adequate physical growth and psychological development in the earliest months of life profoundly influence subsequent growth and development in later years (see Werner 1972). For example, malnutrition resulting from disease, an inadequate diet, or a combination of the two is thought to interfere with the optimal development of the central nervous system. Similarly adequate social and physical stimulation in the earliest months is considered to be one crucial element for the development of cognitive and votive abilities in the young child. The definition of these adequate physical and social nutrients remains an unknown not only for the more developed societies, but especially for the developing societies where even the most rudimentary information on these phenomena are frequently lacking.

Early Childhood

Proceeding to the next stage in the life of the child, many cross-cultural studies concern the age at which societies begin the serious training of their children. Age of training has been related to the expression of guilt in cultural products such as religious beliefs, explanations of illness, and folk tales. Whiting and Child (1953), taking as their measure the degree to which a patient was believed to be responsible for causing his own illness (presumably indicating his readiness to accept blame), found that societies with early weaning, early independence training, and early training in modesty with the inhibition of heterosexual play were those that tended to have this kind of explanation for illness. The age of toilet training was not found to be significantly related. Whiting and Child (1953) tentatively explained this relationship by a process of identification. Anticipating Whiting's (1960) status-envy hypothesis, they argued that parents should seem more powerful to a very young child than to an older one who has already learned, to a degree at least, to cope with the environment by himself. Thus, early socialization should produce stronger identification and, hence, guilt over contravening parental values. It is again possible to relate this association to household structure. Whiting (1959a) reports that household structure is a significant determinant of the age of socialization. Nuclear households are earliest for both weaning (median age two years) and independence training (median age 2 years 9 months) and mother-child households are the latest. On the average they do not begin to wean their children until they are three-years old nor start training them in independence until they are four and one half. Extended and polygynous households fall in between these two extremes for both weaning and independence training.

By combining the scores for five behavior systems, Whiting and Child (1953) developed an index of over-all socialization anxiety as a measure of severity of childhood socialization. Barry (1957) reports that the decorative art forms of societies that are generally severe in training their children tend to be complex, which supports Ayres' work previously reported for infancy. The game forms are also more complex with severe socialization (Sutton-Smith & Roberts, in press). Friendly (1956) shows that such societies tended to have ascetic mourning customs. The relation of social institutions such as household structure to over-all socialization anxiety has not as yet been investigated. Fischer (1959), using the Barry (1957) score on complexity of social organization, however, reports that complexity in social organization, however, reports that complexity in social structure is reflected in the complexity of decorative art. The presence of status distinctions based on wealth, social class membership, or heredity tends to result in complex designs in contrast to those from societies with no rank distinctions at all, or rank distinctions based on age alone. Sutton-Smith and Roberts (in press) also find as you add game-types cross-culturally, there is an increased severity in socialization as well as complexity of social structure.

Another over-all measure of severity of socialization in early childhood, "transition anxiety," is provided by Barry, Bacon, and Child (1957). This is an estimate of the degree of pressure exerted upon the child during his change of status from infancy to childhood. Whiting and his co-workers (1966b) show transition anxiety to be related to household structure. They report that societies with nuclear households are significantly more severe on this score than are societies with extended family households. It has already been pointed out that societies with nuclear family household begin independence training early. It now seems that they are generally severe as well, suggesting that strong pressures in child rearing toward independence are necessary if a couple are to set up an independent establishment.

Another hypothesis relating to the severity of socialization is Whiting and Child's hypothesis of negative fixation. Estimates of the severity of socialization were made by Whiting and Child (1953) with respect to oral, anal, sexual, aggression, and independence training. The presumed effect of severe training was that of "negative fixation" or the anxious preoccupation with the type of behavior system severely punished. The hypothesis was based upon the presumed effects of intrapsychic conflict rather than on stages of psychosexual development (as oral, anal, genital). They postulated that the conflict induced by punishment during the socialization process of habits learned in infancy produces a persistent motivation activating behavior in adulthood in some way related to the conflict and presumably functionally defensive in nature.

Explanations for illness and therapeutic techniques were chosen by Whiting and Child (1953) as aspects which might reflect fixation. A content analysis of magical beliefs and practices relating to illness was made for each society with the five behavior systems in mind. Judging the severity of socialization for each system, the following factors were taken into consideration: intensity and frequency of punishment, suddenness of the transition from behavior appropriate to infancy and that to later childhood, and signs of emotional disturbance on the part of the child.

In general the fixation hypothesis was supported. The severity of weaning (oral anxiety) was strongly related to "oral explanations for illness." Such oral explanations included the belief that sickness is caused by the ingestion of magically poinsoned food or by the verbal spells and incantations of sorcerers. Rosenblatt (1966) found oral anxiety associated with importance of romantic love as basis for marriage. The severity of aggression training (aggression socialization anxiety), which includes the treatment of temper tantrums, physical and verbal aggression, damage to property, and disobedience, was related to explanations for illness involving aggressions. These included hostility toward or disobedience to spirits, poison (if introjected into the patient rather than being ingested), and the use of magical weapons by a sorcerer. The severity of independence training was shown to be related to dependence explanations for illness, a measure which includes the belief that illness could be caused by "soul stealing" or by "spirit posession." The negative fixation hypothesis was not confirmed in the other two systems of behavior. However, there was some indication that relevant avoidance in the anal and sexual behavior systems was used as a therapeutic practice. Societies with severe toilet training tend to have therapeutic practices involving washing or cleansing, the adherence to cleanliness taboos, or the retention of feces, and societies with severe sex training is associated with elaborate menstrual taboos, and Ayres (1954) showed this child-rearing measure to be related to prolonged sex taboos during pregnancy. Each of these may be viewed as an index of negative fixation. Allen (1967) found a strong negative relationship between "ego strength" and childhood socialization anxiety.

A strong association between the severity of aggression training and household strucutre has been reported by Whiting (1959b). Nine-two percent of the extended families in the sample used are above the median on the punishment for aggression. Nuclear households were least severe in this respect--only 25 percent of the cases being severe. In polygynous and mother-child households, 61 percent were above the median. Whiting et al. (1966) in an analysis of the Zuni extended family households suggests that the expression of aggression cannot be tolerated in circumstances where so many people are living in such crowded quarters. Minturn and Lambert tested this hypothesis in 1964 on a sample of 76 societies. They found that "children are severely punished for fighting with each other when many must share cramped living quarters." No social structural variable has as yet been reported to predict the severity of either toilet training or independence training.

Cross-cultural studies of the belief in sorcery and witchcraft have generally interpreted this belief in terms of the psychological mechanisms of projection and/or displacement. Two views of his mechanism have been put forth. One, derived essentially from behavior theory, assumes that fear of sorcerers occurs in societies where the direct expression of aggression is strongly inhibited and, hence, must be either attributed to others or justified by being directed against criminal sorcerers. The other view, derived from psychoanalytic theory, is that belief in sorcery implies the personality variables associated with paranoia--sexual inhibition and latent or overt homosexuality. Whiting and Child (1953) were unable to decide between these two explanations. On the basis of their evidence, sorcery was found to be an important explanation for illness in societies where children were severely socialized with respect either to sex or aggression during childhood. The fact that severity of socialization in these two behavior systems are positively related to one another makes it difficult to disentangle their influence.

Whiting (1959a) presents some evidence in favor of the sex anxiety hypothesis, but the data are not very convincing. The most likely interpretation of the results so far is that there are in effect two kinds of projection, and that the distinction betwen them may correlate to that proposed to obtain between sorcery and witchcraft, the former being a result of the inhibition of aggression, the latter being associated with conflict in the area of sex. That sorcerers are more often male and witches female is suggestive in this regard. Shirley and Romney (1962) show love magic present with high sexual socialization anxiety (but see Bock 1967).

That aggression may be projected has been shown by Wright (1954), using a content analysis of folktales as an index. He showed that in societies with severe training in the control of aggression during childhood the hero in folktales does not direct his aggression toward friends but rather toward strangers or enemies, that a stranger rather than the hero was more likely to be the agent of aggression, and finally that the hero was less likely to be triumphant. Whiting and Child (1953) report a similar finding. Societies with severe aggression training having the belief that spirits can cause illness tend to define the spirits as animal rather than human.

The social structure variables relating to severe socialization for sex and aggression have already been reported--the former is associated with polygyny, the latter with the extended family household. Direct relationships between social structural variables and sorcery beliefs were reported in two studies. Beatrice Whiting (1950), assuming that sorcery functions as a mechanism of social control, showed that a strong belief in sorcery occurs in societies lacking in mechanisms of social control that involve the delegation of authority for the judging and punishing of crime. She also showed that this pattern tended to occur in small rather than in large societies. LeVine (1960) showed that sorcery tends to occur in societies that maximize jealousy between co-wives. In three East African societies similar in other respects, the preoccupation with sorcery was greatest among the Lup where co-wives ordinarily live miles apart. He also reports that, cross-culturally, sorcery is alleged to be a major cause of illness in 93 percent of the societies with polygynous households, 60 percent of the societies with mother-child households, 53 percent of the societies with extended family households, and only 36 percent of the societies with nuclear households. The total pattern for predicting sorcery beliefs thus seems to indicate that such beliefs are held in small societies with no formal systems of social control having either polygynous households and severe sex training or extended family households and severe training in the control of aggression.

Socialization in Later Childhood

An elaborate set of judgments about socialization during later childhood is provided by Berry, Bacon, and Child (1957). These judgments concern the manner in which a child is trained to be obedient, responsible, self-reliant, nurturant, and generally independent, as well as his training for achievement. For each of these behavior systems a separate judgment was made for the general pressure exerted upon the child, the severity of punishment for noncompliance, the performance level demanded, the amount of conflict and the frequency of response.

Separate judgments on the above scales were made for the treatment of boys and girls by Barry, Bacon and Child (1957). Significant differences in training were reported. These involved more stress upon nurturance, obedience, and responsibility for the girls and upon achievement and self-reliance for boys. Although they did not relate these differences to any projective system, they did report that large differences in the training of the sexes occur in societies where large animals are hunted, where grain rather than root crops are grown, where large or milking animals are kept, where fishing is unimportant or absent, where the settlement is nomadic rather than sedentary, and where polygyny is high. They interpreted those results as implying that differential training for boys and girls is required where superior strength and motor skill is involved or where a large family with a high degree of cooperation is required. Munroe, Whiting, and Hally (1969) found that societies that emphasized sex distinctions (in patterns of residence, in kin groups, in kinship terminology, in authority succession, in eating arrangements, and in attendance at birth) less often had institutionalize transvestism. "In general transvestism as a social form is not found in societies that stress sex distinctions of the kind related....In societies where the sex distinctions are few, the behavior and/or conceptual categories of the individual predisposed to transvestism are already relatively near those of females, so that in becoming a transvestite the individual must change comparatively little....The degree of change involved probably affects the likelihood that a predisposed individual will become a transvestite and also the probability that the society members will tolerate the change" (Munroe, Whiting, and Hally 1969:89).

Lambert, Triandis, and Wolf (1959) in the study concerning the nature of the gods, discussed previously, report that the supernaturals are more aggressive in societies which put strong pressure upon the boys for self-reliance and independence. They also report an even stronger relationship in the same direction with a score which combines the pressures exerted in all six systems, that is, nurturance, obedience, self-reliance, achievement, responsibility, and general independence. It is interesting that they assume the religious beliefs to be causal in this relationship, rather than a result of the child-training procedures, for they assume that a belief in aggressive gods requires training a child to be independent and self-reliant so that he can cope with a hostile world as an adult.

Bacon, Child, and Barry (1963) show that societies that severely punish their older children for disobedience, irresponsibility, lack of self-reliance, and lack of achievement are high in frequency of theft. Since they also find that a high frequency of theft is found in societies with low infancy indulgence and severe weaning, they interpret these findings as a reaction to emotional deprivation during infancy and childhood. Such anxieties, except for those associated with severe weaning, interestingly enough, are not related to the frequency of personal crime in adults (see also Allen 1972). Child, Bacon and Barry (1965) found low indulgence of dependency and high achievement pressures related to drunkenness and general high alcohol consumption. This supports their dependency anxiety explanation of alcoholism (Barry 1968).

In a series of studies, the anthropologist John Roberts and the psychologist Brian Sutton-Smith demonstrated a relationship between child training and children's games, using the Barry, Bacon and Child (1957) scales. Putting games into three categories (games of chance, games of strategy, and games of physical skill), they found that games of chance occur in societies where responsibility is highly rewarded in child training (Roberts and Sutton-Smith 1962 & 1966). Games of chance are seen as providing the player with an expression of conflict of attitudes toward responsibility, and an acting out of irresponsible, chance determined fantasies. (Compare feeling responsible with blaming failure as "bad luck.") Games of strategy are found in societies in which emphasis is placed on obedience in child training. Roberts and Sutton-Smith speculate that games of strategy reflect an anxiety about disobedience. Games of strategy enable the child to express aggression and other disobedient acts in play. Games of skill are found in societies in which reward for achievement is high. Such games are "a direct and microcosmis representation of achievement" played by individuals in conflict over achievement. Games are then seen as projections of anxieties engendered by severe socialization practices in child training.

Sipes (1973) reports a study investigating the relationships among war, sport, and aggression. Fundamentally the author is concerned with assessing which of two alternative explanations will be more successful at explaining a relationship between the presence of warfare and the presence or absence of aggressive or combative sports. If combative sports are negatively correlated with war, then the author's "drive discharge model" would be operating which suggests that war type games "work off" aggressive drives, making war unnecessary. If combative sports are positively correlated with presence of war, then the explanatory link would view combative games as training for war. Implicitly at stake is a nature-nurture view of aggressive warfare. Is it basically a drive which can be rechanneled or is it a learned, indeed practiced, behavior? The data show a strong positive association between combative sports and the presence of war, supporting the position that aggression is a learned cultural behavior.

Relationships have also been demonstrated between socialization pressures in later childhood and the basic economic organization. Barry, Child, and Bacon (1959) state, "In considering the relation the relation of economy to adult role, and hence to child training, we felt that perhaps a variable of great significance is the extent to which food is accumulated and must be cared for" (Barry, Child, and Bacon 1959:52). To test this hypothesis, they classified societies on the basis of their subsistence activities, categorized according to the degree to which these implied an accumulation of food. Assuming that food "on the hoof" requires the greatest amount of care, societies that were mainly dependent upon animal husbandry were judged to be highest in this respect, and hunting and fishing societies were judged to be the lowest. Between these extremes a distinction was made between those societies depending upon a combination of agriculture, hunting, and fishing with the former assumed to be higher in food accumulation.

Comparing the societies with extreme scores (animal husbandry versus hunting and fishing as the subsistence economy), they showed that societies with a high accumulation of food put strong pressure upon their children to be responsible and obedient and were correspondingly low in stressing achievement in both boys and girls, independence in boys, and self-reliance in girls. They then constructed a general score which they called "pressure toward compliance versus assertion" by adding the scores on obedience and responsibility and subtracting from this sum the combined score on achievement and self-reliance. The striking relationship of this over-all compliance pressure to the degree to which food is accumulated is reported in Harrington and Whiting 1972.

They noted that the sample of societies rated high on the subsistence scale--those with animal husbandry and agriculture--is rather heavily weighted with cases from Africa. Perhaps, then, pressure toward compliance is an African culture trait and the demonstrated association is therefore spurious. With all African cases omitted from the sample, however, the association between subsistence economy and pressure in child training is still strong. Monroe and Munroe 1972 agree that among culture areas Africa is highest in socialization for compliance and report a within Kikuyu study linking high compliance in children to child participation in household activity (see also Green 1971).

Causality and Feedback

In postulating that there is a causal sequence in illustrating the model in Figure 1, Whiting justifies his logic as follows:

> The correlational method used in cross-cultural research cannot, of course, show the direction of causation. It must rest upon other evidence suggesting the relative plausibility of one or the other assumption as to causal direction... temperature and climate cannot be reasonably assumed to be the effect of a custom. Any association between a climatic variable and a custom can plausibly be interpreted either as an effect of climate upon the custom or as an effect of climate upon some other factor associated with such a custom. For example, in this paper it is not plausible to assume that exclusive mother-infant sleeping arrangements cause a warm winter, or that a long post-partum sex taboo caused a rainy tropical climate. Thus, it is the assumption of this paper that ecological variables determine the customs associated with them" (Whiting 1964:524).

The flow of causal arrows in this model is essentially from left to right. It will be obvious to the reader that if everything is working properly at any given point, there is feedback and support of what has gone before. That is, in the initiation rites' literature, the symbols used in the ceremony are a cultural product; yet they are part of the child training initiation rites and their symbolic treatment of male and female reinforces the social structure based upon sex differences, etc. Recent work has focused upon various kinds of feedback. An example of feedback was encountered by Roberts and Sutton-Smith in their work with games. Following the model, in their 1966 article on games of chance, they suggest that such games may be played in societies whose situations are not easily controlled by skill or strategy, where uncertainty exists, "particularly in the areas of environmental setting, food production, social and political interaction, marriage, war and religion." These uncertain conditions lead such societies to emphasize responsibility in child training and generate conflict in the area of sex, aggression, and achievement, since the life situation is one where "favorable and unfavorable outcomes may occur in an uncertain way" (Roberts and Sutton-Smith 1966:143). Games of chance can be viewed as a cultural product, an expression of responses to the passivity of the player's normal life role incompatible with the role of diligent provider. Differential incidence of gambling in our own society emphasizes this point. Thus "antecedent conflicts produced by socialization...lead to involvement in models of all sorts, including games. These models represent activities in behavior spheres relevant to the antecedent conflicts" (Roberts, Hoffman, and Sutton-Smith 1965:17). Children learn through folklore and games what the culture requires them to know, but will not teach them directly. Referring to what they describe as a conflict-enculturation interpretation, Roberts and Sutton-Smith (1962) argue that

> (1) there is an overall process of cultural patterning whereby society induces conflict in children through its child raising processes;
>
> (2) that society seeks through appropriate arrays and varieties of ludic models to provide an assuagement of these conflicts by an adequate representation of their emotional and cognitive polarities in ludic structure; and
>
> (3) that through these models society tries to provide a form of buffered learning through which the child can make enculturative step-by-step progress toward adult behavior" (Roberts and Sutton-Smith 1962:183-4).

Each type of game provides information to the child about chance, skill, and/or strategy in assuaging conflict and in learning to handle social life. As Roberts and Sutton-Smith say "between the ages of seven and twelve the child learns, in simple direct form, how to take a chance, how to show a skill, and how to deceive" (1962:183). In complex games he learns to combine these skills in circumstances more nearly approaching the conditions of real life. In subsequent studies these authors have demonstrated, for example, that skilled strategy players are more "strategic" in other areas of life (Sutton-Smith & Roberts 1967). Thus games can be viewed, not only as a projective technique or a cultural product, but also as a child training device. Hence a feedback arrow must be shown in the model, from the products of adults and children to child training.

In addition, Whiting et al. (1966b) have argued that in a society which undergoes a change in maintenance systems [due to extrasystemic pressure (see above)] like household structure, child training systems may overreact to the change. This might create cultural products of exaggerated values to bolster the new order (feedback of cultural product on maintenance system). Values like harmony, achievement, and virtue, however, can be so overdrawn and idealized that living up to them is difficult. Thus, Whiting postulates a cultural defense mechanism to deal with failure to live up to the ideal. Projection of hostile feelings and bad thoughts onto witches or outside the group, and bragging about success even if none exists, are seen as culturally provided defense mechanisms against failure to meet the dominant values. this would be an example of feedback of cultural product upon personality systems. An interesting avenue of study is what happens in social change situations to these various parts when there is less than perfect fit. What if child training practices seek to inculcate behaviors appropriate to maintenance systems which no longer exist, thereby producing personality types which cannot function successfully within the new order? What if cultural products like values, religion, etc., do not reinforce these new behaviors? These and other questions await answers. Other extrasystemic factors recently investigated directly related to behavior described here include diet (Bolton 1973, Bolton and Vadheim 1973, Rohner 1970) and climate (Robbins, DeWalt and Pelto 1972).

Sex Role and Initiation

The intersection of two characteristics makes the cross-cultural study of sex role socialization and initiation rites a natural and basic part of any psychological anthropology of education. In the first instance, biological gender is something that varies in a constant way in all human societies, and societies are free to attend to the difference in allocating role responsibilities and constructing divisions of labor. Most attend to the difference (see Linton 1936:116), but the degree to which it matters varies a great deal (see D'Andrade 1966, Barry, Bacon and Child 1957). Secondly, in effecting the transition from child (infant) to adult (in some societies more importantly male adult or female adult), societies often make use of ritualized initiation processes to mark the transition these often include relatively formal instruction for the initiates as to their new obligations. This instruction, sometimes including "bush schools," is for many societies the only "formal" education setting that children will experience. Therefore much interest has been shown as to what these rites are about and how they accomplish what they set out to do. Some initiation rites seem concerned with making adults out of children (e.g., many North American Indian rites); others, in societies in which sex differences are important, are concerned with not just making adults, but particularly male as opposed to female (or vice versa) adults. The relationship of male initiation rites to the socialization of proper sex role behavior has been extensively studied.

In their interpretation of male initiation rites, Whiting, Kluckhohn, and Anthony (1958) used the psychological concept of sex identity. Their cross-cultural study established the following:

1. A close relationship between mother and son during infancy as a consequence of either (a) their sleeping together for at least a year to the exclusion of the father, or (b) the mother being prohibited from sexual intercourse for at least a year after the birth of her child, or (c) both of these together, has measurable consequences which are manifested in cultural adjustments at adolescence.

2. These adjustments are either (a) a ceremony of initiation into manhood involving at least one and generally several of the following factors: painful hazing by the males of the society, tests of endurance and manliness, seclusion from women, and genital operations, or (b) a change of residence which involves separation of the boy from his mother and sisters and may also include some formal means for establishing male authority such as receiving instructions from and being required to be respectful to the mother's brother or the members of the men's house.

> 3. If both the factors specified in (1) are present, the consequences at adolescence tend to be more elaborate and severe than if only one is present (1958:368-369).

The authors offered an interpretation of their findings based upon the personality variable of sex identity. This interpretation was further refined and more completely stated by Burton and Whiting (1961), who viewed the absence of the father as leading to primary cross-sex (feminine) identity in boys. Initiation rites are designed to overcome primary cross-sex identity and substitute male identity and behavior. If the identity conflict were not resolved, boys would retain behaviors inappropriate to the society's adult male role.

Burton and Whiting (1961) distinguish three kinds of identity: "attributed" (statuses assigned ego by others in his society), "subjective" (statuses ego thinks he fills), and "optative" (statuses which ego wishes to occupy). The aim of socialization is to produce adults whose three identities are congruent. Optative identity is not always a conscious wish, and in fact can be assumed to be either an unconscious wish or a cognitive style; subjective identity, on the other hand, is conscious.

Cross-sex identity, used in reference to males, means that they identify with women, usually the mother. According to Burton and Whiting, the individual forms "primary" or "optative sex identity" in infancy and "secondary" or "subjective sex identity" in childhood, corresponding to the status arrangements encountered by him in those respective periods. Primary cross-sex identity is linked to absence of the father as measured by exclusive mother-child sleeping arrangements and long post partum sex taboos. Secondary male identity, in contrast, is linked to male influence as measured by patrilocality. The definition of father absence for primary cross-sex identity is different from that for secondary because the domain of the child changes. When the child is an infant, his domain is limited largely to where he sleeps; hence, the importance shifts from sleeping arrangements to whether the father is present in the household at all to the status males possess (for example, in a patrilocal or a matrilocal household).

The relationship of cross-sex identity to behavior depends upon the combination of primary and secondary identities. Primary cross-sex identity may be either reacted against or expressed, depending upon the secondary sex identity. Some societies institutionalize a means for resolving an underlying conflict in sex identities (primary, female; secondary, male) in favor of the secondary sex identity. Circumcision-type initiation rites are an example of this. The ceremonies occur in societies which differentiate boys from girls (Harrington, 1968) and presumably teach boys the appropriate male role. Thus they attempt to insure proper masculine role behavior by making it clear that the boys are now men and are different from the women who have raised them.

If there is a conflict between primary and secondary sex identities without a mechanism to resolve it, the individual reaction to primary feminine identity may be an exaggerated masculinity, through which the boy tries to resolve the conflict (see Munroe, Munroe, and Whiting 1965). Such hypermasculine traits have been linked to feminine identity by several researchers. B. Whiting (1965), for example, has explained aggression as "protest masculinity," and found it more often in those societies where the father has low salience in infancy but high status later in life. (See her article, 1965, for a summary of the literature on protest masculinity.) If glory in war is taken to be a reasonable index of hypermasculinity or the exaggerated need for men to defend themselves against femininity then it should be found more commonly in societies with an exclusive relationship between a boy and his mother during his infancy combined with a low salience of the father during this period. Such turns out to be true. Polygynous societies in which each child has a mother but at most half a father who often sleeps and eats elsewhere are more likely to value glory in war than do monogamous societies. Exclusive mother-son sleeping arrangements--a more explicit measure of a condition likely to produce cross sex identity is also significantly associated with the glory in warfare score. Whiting, Kluckhohn, and Anthony consider juvenile delinquency in the United States to be another form of exaggerated masculinity:

> It has long been known that there is an association between certain types of juvenile delinquency and broken homes. We would predict that the probability of a boy becoming delinquent in such instances would be highest where the separation of the mother and father occurred during the early infancy of the boy and where she (later)...remarried (1958:370).

The macho complex among Mexican males would be another instance (Lewis 1951). A further case may be that described for Cayman (Howe 1966). Such reactions of exaggerated masculinity typically come about where there is an overlaying of male influence upon a child with primary cross-sex identity. Cultural mechanisms to resolve the conflict, such as circumcision-type initiation rites, are said to make such individual protests superfluous.

Cross-sex identity may be openly expressed if the primary and secondary identifications are both feminine. One institutionalized expression is couvade, a set of practices in which the man shares symptoms of pregnancy and childbirth with his wife (see Munroe, Munroe and Whiting 1965). Burton and Whiting said couvade should be a good index of the wish "to act out the feminine role and thus symbolically to be in part a woman" (1961:91). Munroe, Munroe and Carson (1973) support this. Individual expressions of femininity are also possible. D'Andrade (1962) found that in the United States high feminine identification scores on the Franck Drawing Completion Test was strongly related to father absence during the first two years of life. Carlsmith (1963, 1973) as well as Sutton-Smith and Rosenberg (1968) found that father-absent male students had some feminine patterns on scholastic aptitude tests, or other experssions of cognitive cross-sex identity.

D'Andrade (1973) reports similar results with the Franck test as a measure of cognitive cross-sex identity for boys for a neighborhood composed of American blacks and third generation Barbadians outside Boston for father absence in the first three years of life. Harrington (1970) was unable to produce such findings for a population of abnormally behaving adolescent boys, and argued, following recent findings in psychology, that father absence was too crude an approximation of a variable that had to describe the relationship of the father to the child: father salience. In addition, he argued that the role of the mother had to be taken into account, and following Rosenberg and Sutton-Smith (1970) we might also argue the importance of the sibship. Longabaugh (1973) explicitly investigates the effects of mother behavior on the effect of father absence. Although not dealing over a long period of time with the salience of the mother to the child, he investigates shorter term effects and based upon brief observation argues that mother behavior toward the son is a variable moderating the relationship between father absence and femininity of the son's semantic style.

Munroe and Munroe (1973) investigate the individual expressions of femininity to be found if initiation rites predicted by the theory outlines are not performed. They compare four East African societies in which interviews were conducted with adult males during the wife's pregnancy. They report that men in a rites-absent society (Nilotic) report significantly more symptoms themselves during their wife's pregnancy than males in the societies in which initiation rites are present, offering evidence of the efficacy of such rites in effecting cognitive changes in sex identity.

The connection between subjective cross-sex identity and overt behavior was specifically tested by Harrington (1970), who studied a group of hospitalized boys in the United States who had shown errors in sex role learning. Harrington found support for Whiting's explanation of male initiation rites in terms of primary and secondary sex identity. Boys with exaggeratedly masculine behavior more often had primary feminine identity and secondary masculine identity, as measured by personality tests, than boys who did not show errors in sex role learning. Boys whose behavior showed errors in the other extreme (behavior inappropriate to the male role) had both primary and secondary feminine identity. Thus the association of measures of primary and secondary sex role identity with the socialization of male role behaviors has been fairly well documented both cross culturally and by within-culture replications.

Circumcision-type initiation rites are said to be necessary to overcome primary cross-sex identity and inculcate properly male identity and behavior. Recent work in symbolic anthropology, particularly in the work of Turner (1969) and the studies in Mayer (1971) suggest that by a careful analysis of what goes on within these rituals we may learn more about the dynamic by which they operate. What is particularly needed is a knowledge of what if anything these rituals actually accomplish in terms of socialization. John Herzog (1973) attempts to assess the effects of initiation rites. He administered questionnaires to groups of boys, one inititated in 1969, one postponing initiation till 1970, one till later. Each group was interviewed one month before the 1969 initiation and four to five months after by initiated males from the same community. The findings do not document an immediate impact of initiation itself; perhaps because of the short time duration between the pre- and post-stages (see Harrington 1968 for an argument which would require effects to be measured over a longer period of time), and perhaps because of the interviewing having been done by initiated youths which might have tended to homogenize responses around a cultural norm. However, even in these circumstances, Herzog was able to show that a combination of initiation plus secondary education does have a recognizable impact on boys' self concepts. ~~A recent~~ study of Granzberg's (1973) begins to answer this question, not for circumcision-type initiation rites but for rites like those of the Hopi, that emphasize the distinction between the child and adult roles (but see also Schlegel 1973).

Most of the cross-cultural studies of sex role learning reviewed here have been limited to males reflecting a bias to the literature that may be accounted for to some extent by the fact that most of the authors are male. Judith Brown (1963) has redressed this imbalance in part with a fine study of female initiation rites. She draws three major conclusions. First, female initiation rites occur most often in societies where the girl, as an adult, will not have to leave her parents' domestic unit; second, those initiation rites that subject the initiated girl to extreme pain are found in societies in which infant and childhood sex identity are in conflict; this establishes a relation between painful female initiation rites and male genital mutilation rites. Third, female rites are found in those societies in which women are important in subsistence activities, thereby (according to Brown) giving her recognition for her contribution to the existence of the society. While much remains to be done on sex role learning by women, the work of Brown and Barry, Bacon and Child offers some useful beginnings.

Suicide is a trait which shows sex-linked findings. Threatening suicide is more often used by women than it is by men (see Ferberow and Schneidman 1961) and more by boys with feminine rather than masculine identity (Harrington 1970). Cross-cultural studies of suicide have produced some findings which have relevance to students of education. Krauss offers data that frequency of suicide is linked to societal complexity, with low complexity societies having low suicide rates, medium complexity societies having high rates, with highly complex societies divided between low and high rates. Insofar as formal education is linked to societal complexity, there is a possibility of a direct, though possibly curvilinear, relationship between education and suicide. In addition, the cross-cultural evidence emphasizes the effectiveness of societies in binding members into patterned social relations (Krauss 1970); strong family ties and social structure (Gobar 1970), is preventive of suicide (but not necessarily threats of suicide, see Kreitman, Smith and Tan 1970). As Hipler (1969) emphasizes, these represent interrelationships of child-rearing variables, social structure, and cultural values; a set of problems of direct relevance to educators.

Recent research has also been conducted on sex-linked task assignments, sex preference and role performance. Ember (1973) hypothesized that boys observed to perform a great deal of "feminine" work (by Luo culture definitions) would tend to exhibit more "feminine" social behavior than other boys (measured on basis of egotistic behavior, altruistic and prosocial behavior scales). A comparison of social behavior scores of boys doing little feminine work, boys doing a great deal of feminine work and girls, showed that boys who did a great deal of feminine work were intermediate in their social behavior between other boys and girls. Further analysis revealed that different types of work, all of which were considered feminine, were differently related to social behavior than other boys, but boys who did a great deal more feminine work outside the home were not more feminine than other boys. Perhaps this feminine task performance in the home implies task overlap with the mother and an identification component. Harrington (1970) shows that task overlap in the home with the mother, as opposed to the father, for boys is a useful predictor of cross-sex behavior. These findings emphasize the interplay of various socializing agents which needs to be considered by researchers in education.

METHOD

I would like to make a few observations about methodology before leaving the topic of socialization. Over the past twenty years there have been increasing numbers of studies purporting to be about "socialization." Nearly all of these studies have contained deficiencies traceable, at least in part, to the existence of disciplinary boundaries. While many disciplines share a theoretical interest in socialization phenomena, their methodologies do not correspondingly overlap. Indeed, one can read about "anthropological methods," "psychological methods," and "sociological methods." Since methodology must follow from theory, not vice-versa, this is a paradox. What is needed is research which will develop in useable form an integrated set of methodologies for the study of socialization. These methodologies are presently associated with a number of different disciplines, but primarily with the fields of anthropology, psychology, and sociology.

We need to bring the various methodologies into one integrated whole which can be easily used by all researchers in socialization. This is not to discourage interdisciplinary collaboration by researchers--quite the opposite would be my wish. However, reality dictates that opportunities for truly interdisciplinary research are often limited by discipline organized academic structures, by the low probability of finding someone from just the right discipline at just the right time who is himself interested in, available to, and capable of collaboration. My experiences in even the most fortuitous of circumstances make me certain that all those interested in the study of socialization cannot find suitable collaborators. Even for the few who can, the process of collaboration, especially in the early stages, is extremely time consuming, as each person explores--often for the first time--the other's academic world. While this is a fascinating process, assuming it goes well, it does effectively postpone the research for such a length of time that the nascent researcher, faced with a choice between a "quick" within disciplinary effort and the uncertainties of an interdisciplinary encounter, may too often choose the latter to the detriment of research.

We need to separate various research techniques from the disciplines to which tradition assigns them, while at the same time producing research into socialization which they would regard as legitimate. Such work will bring the strengths and fruits associated with interdisciplinary research without the actual necessity of members of a number of disciplines working together on the problem. The work must be as accessible to an anthropologist wanting to learn experimental procedures as it is to a psychologist wanting to learn participant observation techniques, and must be guided to some degree by the concept of "limits of naivete" proposed by the anthropologist Max Gluckman and economist Ely Devons. You do not need to become an anthropologist to do participant observation, but you do need to know enough that you do it in a way that will be acceptable by anthropologists. Similarly, you do not need to become a psychologist to do experimentation, but you need to know enough so that you do not produce research unacceptable to psychologists.

The study of socialization requires knowledge of what is to be learned as well as how it is to be learned. Accurate descriptions of the society, the culture, variations and cycles within groups, and the choices available to actors at various social positions and educational settings must be our first step. This is as true in dealing with our own society and its sub-cultures as it is when working cross-culturally. Only then can we investigate how appropriate behaviors are learned, using concepts of personality and theories of learning to show how the knowledge is acquired.

The delineation of what is to be learned and the investigation of how that learning occurs (in part by showing that it does) require in most cases different batteries of research techniques. But, the overall study requires a deliberate interweaving of the various research tools to provide a more complete and efficient investigation than would be possible with the techniques used in isolation. Each of the research techniques used is, I argue, best suited to particular information production purposes, and is relatively inefficient for others. But, a discipline's habits may force an experimental methodology for a research problem for which informant interviewing would be far more suited. Secondly, a combination of research techniques allows the use of some in settings in which they would otherwise be suspect. For example, ethnographic data allow the consideration of cultural and sub-cultural differences in designing and conducting research on general psychclogical processes using experimental designs. Experimental design in isolation requires the experimenter to base many of his research decisions on his often implicit knowledge of the culture of the participants in his research. People really do not know about how their own cultures operate as well as they think they do, and know even less about how other (sub-) cultures operate. Such knowledge is prerequisite to experimental design. Working the other way for a moment, anthropologist are sometimes glib about how learning occurs. For example, Jules Henry as participant observer in a school classroom may tell us that "kids learn to be docile there" but such a conclusion (hypothesis) is based upon his intuition about how learning occurs, based upon his own feelings. What do the teenagers demonstrably learn in such a setting? Where is a test of the existence of the intuited outcome?

In the first instance use will be made of various informally cross checking methodologies subsumed under the rubric "participant observation" including informant interviewing, observation, recording of data, census taking, etc. In the assessment of learning outcomes systematic observation, experimental (both field and laboratory) techniques, and various cognitive and perception eliciting procedures are used. Other techniques could be used in either instance and include multidimensional scaling, survey techniques, various sociometric procedures, and networks analysis. The proposed methodology should be useful for many particular foci of socialization, political socialization, ethnic socialization, or any other.

There have been published recently reports about two studies into socialization which are by these definitions complete: the "six cultures project" and research in Liberia by Cole and his associates. The six cultures project began twenty years ago and the final report on the systematic observation of children is not yet published, although the ethnographies were published in Whiting (1963) and a factor analysis of mother interviews in Minturn and Lambert (1964). The study included six fieldteams and scores of collaborators and assistants. Cole (et al., 1971) and his associates combined, albeit belatedly, ethnographic and experimental procedures in researching the Kpelle of Liberia over a period of several years. Both the studies then were large scale team efforts, and took many years to complete. No one researcher can ever hope to do as much. However, both were exploratory efforts which charted new methodological and theoretical territory; both were wide ranging in behaviors under study. These are significant differences.

We need to make accessible to scholars with smaller scale problems a set of techniques which will enable him (her) to successfully research them.

These socialization studies are essential to an understanding of educative processes in our own as well as other societies. The need for them is so pressing and the quality of truncated researchers into socialization can be so low, that a way more productive of results in a shorter time must be found and made generally available.

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III. Social Change

In our discussion above of perception and cognition, indirect mention was made of processes of acculturation when findings were reported that showed effects on cognition of western experiences, western schooling, etc. In the following section we focus explicitly on problems of social change and acculturation broader than simply examining consequences of contact and western culture on cognitive functioning. In doing so, we have chosen to separate our discussion into two kinds of acculturation settings which seem of particular importance to educators: acculturation among various ethnic groups within the (particularly urban) United States, and culture contact situations of native cultures outside the United States. The division is to a certain degree arbitrary in terms of the acculturation phenomena, but facilitates discussion of the relevance of the findings of psychological anthropology to education.

CHANGE ASSOCIATED WITH MIGRATION AND ACCULTURATION OF U. S. ETHNIC GROUPS

In examining acculturation among ethnic groups within the United States we focus first on problems posed for education by recently migrated groups, then focus on problems of ethnicity as they influence these groups and the populations they join in their new settings.

a. Migration

There is an extensive and rich literature on migration, per se, and various migrant groups, but this literature does not examine schooling or the consequences for education of migration, or of education for migration. Barnes' (1969) article stresses that the critical point for investigation of migrants is the ethnic boundary that defines the group and how boundaries are defined in different situations. Since to a large extent ethnic boundaries channel social life, the process by which boundaries are maintained or deemphasized becomes the crucial factor for analysis and these conceptualizations lead directly to important future research. As psychological anthropologists, we must inquire into the question of socialization ignored by the "post structuralists" as Van Velsen (1967) describes them. For each migrant groups examined we need to examine how children learn about networks and the ethnic boundaries that define them in the adult population.

While there is a large literature in social anthropology on education, it has not highlighted problems of migrants and ethnicity, although examining related variables, especially social class (and in psychology social class and race). Hargreaves (1967) and Lacey (1969) show that the labeling of children and assignment of children to classes greatly affect what children learn in school. The content of curriculum and the presentation of material is also influenced by the ways in which children are placed and the corresponding stereotyping of children (Keddie 1971). Watson (1970) shows the interaction of skin color, legal definition of ethnicity, and school policy in South Africa. Hasley, Floud and Anderson (1961) point out that there is correlation between social class and academic achievement in school. It is necessary to examine these variables in the context of their relationship between migrant networks, ethnic boundaries, corresponding socialization processes, and the relationship of these factors to school interaction, academic placement and school achievement. The American literature in anthropology and schooling (Wax 1963, 1973, Chance 1973, Wolcott 1969, Lesser 1961, for example) has rarely examined the ethnic questions of urban migrant groups (but see Ogbu 1974). The recent American Ethnological Society--Council on Anthropology and Education symposium on learning and culture (Kimball and Burnett 1973) contains only one article based upon field work with urban migrants in examining education (Harrington 1973). The Anthropology and Education collections by Gearing, Wax and Diamond (1971) and Ianni and Storey (1972) show similar gaps. There is, of course, anthropological research in urban schools reviewed by other National Academy of Education committee reports, but there is little research which would bring psychological anthropological theory and methodology to bear on the problem of the education of these migrant groups in the bilingual, multi-cultural settings of urban USA.

This is alarming since in recent years the education of the children of newly arrived migrants has been one of the great failures of the American school. This state of affairs is perhaps most acute in cities. For example, in New York city since the end of World War II some millions of new residents have come from the islands and territories of the Caribbean basin, as well as from the rural areas of the United States. These migrants, many with little or no knowledge of English and nearly all carriers of a culture distinctively different from that found in urban America, have clearly strained existing educative resources and have helped compound the already present problems of education in a changing industrial society. As the migrant population is comprised of adults of child-bearing years, with school age children, it is within the public school and initially within the public elementary school, that the effects of the migrations become apparent. Meeting the needs of the rapidly changing constituency while at the same time maintaining a viable educational system is a central problem to those involved in urban American schools. We see three facets to the problem: curriculum development, placement of migrant children, and stereotyping of incoming groups leading to self-fulfilling prophecy effects.

Curriculum development. The school faces the task of constructing a curriculum relevant to its rapidly changing constituency. Traditionally the curriculum has been designed to meet the needs of students of the American "mainstream" culture, and educators have assumed that children who were not "mainstream" would become so. The validity and utility of the assumptions of homogenization of common schooling are thrown into doubt by the tremendous strains engendered by this newest wave of socio-cultural diversity. The question goes beyond what schools should do about the content of the curriculum. There is also a question about the goal of the curriculum--should the school teach mainstream skills, or foster cultural diversity? The irony is that much of the debate is waged with no knowledge of the cultures themselves. Further, the debate parellels one in anthropology itself (see the discussion of Hannerz below). While these new groups of arrivals share certain similarities, evidence also dramatically indicates that fundamental differences exist among them, and many have consequences for education. Research that we have already conducted in New York city schools reveals that systematic differences between migrant groups have had, and continue to have, significant consequences for the child's performance. In addition, they affect the way in which schools choose to respond or avoid responding to the populations they serve (Schwartz n.d., Lopate n.d., Harrington 1973, Dalton, Foxworthy and Schwartz n.d.). Curriculum problems encountered by migrant groups run the gamut of degrees of severity; from the unavailability of any material in the child's language--and/or the unavailability of staff who speak a language he can understand--to more subtle distinctions of what is appropriate behavior "here" with its implications that other behavior is bad and unreasonable.

Academic placement is another facet of the problem presented by migrants that schools must solve. Many children are coming to the city after their school careers have already begun. Schools must try to develop programs that will capitalize on their previous educational experiences as well as having programs that will integrate these newcomers as smoothly as possible into the ongoing school structures. Previous access to educational facilities has often been limited. Economic pressures on familites complicate school attendance further by requiring children to help work for the support of the family. Consequently, many children coming from the Caribbean basin, and some from the rural South, who enter the school system have a chronological age without its usual "educational achievement." Occasionally children of thirteen and fourteen come to the public school with no previous school experience, unable to read or write in their own language and with no knowledge of English. The introduction of migrant population children to the schools is a matter of grave concern to the educators involved. Yet the knowledge base upon which to make decisions is very weak.

Stereotyping. Teachers over the years in the public school develop sets of expectations about the proper role of children and parents vis-à-vis the school. In addition, stereotypes develop about the various migrant groups. Behavior which is often the result of the situational adjustments that are being made by migrant groups is sometimes interpreted by teachers as pathological faults of individual students and used to reinforce negative stereotypes about the group from which the student comes. Attitudes toward race, and other ethnic variables can similarly carry expectations with them. Value judgments—"His family are just farmers," "They are very dirty people."—are frequently heard in our own fieldwork. Various negative impressions held about migrant children are reinforced by the reality that they often do require more time, and because of geographic mobility, can frustrate teacher initiatives.

When the population served by the school in culturally heterogeneous while the school staff is much less so, the alienation of the school and its staff from students and their families becomes acute. One solution is to hire school staff so as to increase their cultural diversity. However, this is only a partial solution since each teacher has in class students of many cultural backgrounds. Further, while a particular teacher may be of Dominican background, he has a very different (urban) way of life from the recently arrived Dominican rural child in the neighborhood served by the school. Even if they share origins, there may be as much "cultural" difference between them as between a white middle class teacher and a rural black child. Halsey, Floud and Anderson (1961), for example, have pointed out the tenacity with which newly middle class teachers espouse traditionally middle class values. In a sense, the teachers are trying to put some distance between themselves and their origins by separating themselves culturally from children of similar backgrounds. In one asserts that schools should be staffed by teachers from the groups the school serves (and assumes that such staffing would be effective), one encounters a crippling practical problem: Migration of professionals does not always precede or accompany the migrations we have described, and tenure and union regulations prevent total responsiveness to shifting trends. Clearly other solutions are necessary.

One solution is to provide teachers of a school more information about students and their backgrounds, as well as concepts and ideas based on this information which would lead to constructive action and change. This, we would argue, would be in the best tradition of applied anthropology. In regard to curriculum, how can curriculum be planned for children unless we know its relevance for and place in their lives? Must we not know how the structures and curriculum of the school compare with the structures and dynamics of the students' lives outside of school. In other words, taking education to stand for a process broader than just what happens to a child in school, must we not know something of his education in order to plan for his schooling? Might not children be more successful in school if school structures more nearly reflected those educational settings found in their own culture? In addition, previous research has shown that information about how children behave outside of school is important, indeed vital, to understanding how a child behaves in school (Schwartz n.d. and Harrington 1973). Curriculum development and reform built upon a solid knowledge of the content of the cultures served and the educational aspirations of the people served hold much greater promise for success than curriculum decisions made without such knowledge.

Providing data on differential patterns of socialization and acculturation among ethnic groups will also aid in the problem of pupil placement. Detailed knowledge of the educational experience a child is likely to have had when he comes to the school greatly facilitates decisions about placing him in the various settings available in school. This point links the problem of placement with curriculum reform: knowledge of the educational experiences the child has had and is having outside of school can show a need for increasing the number of curriculum options within school, thereby providing alternatives closer to those in which the child is already functioning. Suppose research shows that children of a certain group learn well in peer-peer settings and that curriculum reform has brought peer-peer learning opportunities into the school. Members of this group can then be placed into the kind of educational setting in which they have shown competence.

As to the problems of stereotyping, our approach seeks to maximize and analyze the differences between the study populations and to work out the implications of these differences for schooling. This approach is quite different from that taken by those who assert that while migrant groups are different from the "mainstream average," they will eventually become socially and culturally assimilated so that their present differences can be ignored. The increasing emergence of cultural pride, and the revitalization movements (Wallace 1961) based thereon make such assumptions appear naive. Information about the cultural diversity of the populations served by the school should, through feedback to school personnel, counter commonly accepted orientations toward or stereotypes about these groups and others like them. However, this approach is not without certain risks.

Ethnicity:

Ethnicity is here viewed as a complex interaction of a variety of factors each of which may create important differences in the behaviors we seek to study. In order for a concept of ethnicity to be applicable it must contain the factor of nationality, and we shall take up this factor first. Extensive studies have been done by applied anthropologists from Columbia University in the part ten years of the various nationality groups found in New York City. This work has heavily utilized the concepts of social field and networks and has attempted to study these populations not only in New York City but also in their countries of origin before and during the process of migration. From this and other research we have been able to identify critical sociological dimensions that affect the move to the United States. such as the demographic composition of the migrant group and the types of migration which occur (particularly the circulatory migration practiced by Dominicans and increasingly by Puerto Ricans).

It is clear that there are differences among these nationality groups and that these differences are not clearly understood by the staffs of many schools. Language is one variable that distinguishes among the nationalities. While there are more refined differences, Spanish speaking groups are often lumped together; many teachers--indeed many New Yorkers--assuming that Spanish speaking students are all Puerto Rican. Such assumptions of nationality from language are not welcomes by, for example, Dominicans to whom it is applied: there are often strong antagonism between the Dominican and Puerto Rican groups. In addition to language differences, nationalities differ in the legal definition of their stay in the United States. Puerto Ricans are legally citizens and legally residents in the United States. Dominicans are simply denizens. Those who are in the country legally are still waiting for their eligibility requirements to be met for citizenship. Even more confounding is the fact that many of the Dominicans are in this country illegally e.g., they may have overstayed a visitor's visa (Hendricks 1971) and these must actively seek to hide their status from authorities. These Dominican parents are much less able to participate in school politics or to provide the school with accurate data about family size, birth place, etc.

In addition to the differences among nationalities by language and legal status, there are also nationality differences on an additional set of factors which contribute to a meaningful definition of ethnicity. Differences along these variables can be found to some degree within all the nationality groups. These factors are important in influencing relationships among adults, among children, and between the groups and school personnel. These factors include skin color; educational background and attainment of parents; whether the migrants come from urban or rural backgrounds; their occupation and income; religion, and the dialect differences that are found within language groups.

Research I carried out at Teachers College's Center for Urban Studies and Programs in the early 1970's has strongly suggested that each of these variables can influence how a teacher responds to a child in class. Skin color is sometimes used by teachers as the sole criterion for judging ethnicity and through ethnicity his ability; children of lighter skin receive more positive attention (see also Rabovits and Maehr, 1973). Highly educated parents have been observed entreating and receiving special favors and treatment for their children. Children from rural areas face adjustment problems in New York City to a greater degree than urban children, perhaps in part because such a background is often interpreted by teachers as a criterion worthy of their concern (His parents are just peasant farmers, you know; he has a long way to go"). Since teachers bear many norms of American culture as well as norms of the city culture, they also respond to occupation and money cues of parents. Dialect differences between spoken languages of the nationality groups are used as cues to infer inferiority, also. Black English is "wrong"; Puerto Rican Spanish "does not sound good," etc. Observers have also described non-verbal communications habits being used as criteria for evaluation. For example, children attending a Spanish dominant school's Spanish Heritage Day assembly were upbraided (by a U. S. born, middle class black school administrator) for shouting approval and clapping and haughtily told that "'here' we express approval only with our hands, not our mouths."

We perceive ethnicity to be a combination of the variables outlined above. While this number of variables produces a very large number of combinations and hence an enormous potential number of ethnic categories, the actual diversity is not so great. For example, there are very few urban Dominican immigrants; none have citizenship; and most are lower class campesinos.

It is enough of an anthropological commonplace that cultural values affect performance evaluations and perceptions of competence to assume that such factors will be at work. It is too much of a commonplace, however, to assume that we know specifically what the relationships are without testing them. This means first identifying the values which are held by the various ethnic groups which could affect their performance evaluations and perceptions of competence in school settings, and second, demonstrating that these values in fact are reflected in such evaluations and perceptions within adults and children.

Probably the best known account of how cultural values different from those of the school have affected performance evaluation, success, failure and perceptions of competence is work done among the Navajo and the schools which are run by the Bureau of Indian Affairs (see, e.g., Leighton and Kluckhohn, 1946). The Navajo value a democratic harmony. To be different from a norm is to be deviant and by definition to fail on this important standard. Teachers, however, judge achievement purely in terms of success on school tasks, and distribute rewards differentially on that basis. A student who achieved an "A" on a test in which "C" was the norm was praised in front of the class as an example to be emulated. The "successful child," however, was filled with embarrassment and shame at being so exposed as different from his peers. He could be expected to take care not to "fail" in this way again.

The entire thrust of the anthropological literature has been to demonstrate that different cultures allocate values differently and that these values have consequences for behavior. This literature has gone well beyond simplistic assertions that culture A is different from culture B, since anthropologists have been able to account for values through the effects on child raising of family, political, and economic organizations (see socialization above). Value systems, then, are deeply embedded within a cultural matrix and more difficult to change in an acculturation situation than learning about content or belief systems (see Whiting and Whiting 1961). Therefore the way a particular culture's values lead it to evaluate tasks expected of its children in schools may lead to serious and pervasive conflict when schools are run by and attentive to the values of a different culture.

Judgments of success or excellence by school personnel may also be at variance with judgments produced by a particular ethnic group. Indeed, what the school defines as a failure may not be so perceived by a particular group being served; and what a particular group defines as a success may seem inappropriate behavior to the school. Examples of each abound. A school is setting up a bilingual education program in response to an obvious perceived need because it has many Spanish speaking students. However, U. S. born Blacks object to the diversion of funds from their children, and a group of "middle class" Puerto Rican parents object to their children being taught to read in Spanish because this will prevent them from getting "white" (English speaking) jobs (see Sanday 1973 for a useful distinction between cultural and structural pluralism). Conversely, other Spanish parents are actively concerned with maintaining their own ethnic identities with their linguistic heritage and want their children to read and write adequately in Spanish. More traditional schools than the one just cited have no bilingual program (even schools with 60% Spanish speaking children lack them and have less than 1% of the staff who can even speak Spanish). These schools only value learning to read and write in English, and judgments of competence are often made by such schools solely on this criterion. In such a setting a student, no matter how competently he can read or write in Spanish, is evaluated solely by his scores on an English reading test!

These anecdotes emphasize the contradictions that can exist between school goals and the goals of the ethnic groups which make up the school population. These contradictions have consequences for students. While the findings from psychology are generally consistent with the statement that competence on a particular task is rewarding, the anthropological literature would suggest that competence in a task valued by one's culture is more rewarding than competence at a task not valued by one's culture; and that failure at a task valued by one's culture is more costly than failure at a task not valued by one's own group.

a. Dominicans in New York

Results from three major sources (Hendricks 1973, Walker 1973 and Foxworthy 1972) argue that Dominicans parents tend to view education as learning how to read and write. Tasks undertaken in school other than these are said to "not belong in school." There is some evidence to suggest that Dominican children, at least when they first enter school, share their parents' views. The purpose of school as Dominican parents perceive it for their children is to get enough English to get a good job. Education is said to be seen by Dominican parents as a validation of the change of status brought about by their social mobility from the life of the campesino in the rural Dominican Republic to urban New York. While the prime reasons for migration are said to be economic, an educated child is evidence that the migration has been successful, for if the child had to work to contribute to the support of his family he could not be educated.

Dominican parents expect the teachers of their children to be authoritarian and to maintain strict and effective discipline. Teachers who define their role in a more informal way (e.g., an open classroom) are often interpreted by Dominicans as weak and incompetent. Further, if a child acts out, Dominican parents expect the teacher to handle whatever happens. A teacher who calls a parent to ask for a conference about or to report a misbehaving child is regarded as weak and unable to handle discipline. The attitude toward education is also reflected in the attitudes toward teachers. Teachers who strictly attend to teaching the child mathematics and how to read are valued; teachers who emphasize other topics or how children feel are thought to be worthless. Care should be exercised in applying these descriptions of Dominicans in New York to other settings. In addition, Hendricks' (1973) was a study of a largely stable "middle-class" group, which may differ in important respects from more recently arrived Dominicans.

b. Dominicans and their New York Neighbors

We suspect from our own preliminary work that Puerto Rican and Black ethnic groups are both split into what for convenience we shall label "middle class and lower class" groups. The middle class seem, like the Dominicans, to favor reading and more formal aspects of education as ways in which their children can become middle class. The lower class description refers to the more politically oriented sections (black power, Young Lords, etc.), who value verbal and social skills, and denigrate school tasks as middle class "white" skills improperly imposed on a different culture, and who appear to rely on political maneuvering to gain resources. Cuban and Dominican groups do not seem to be so split, and seem rather consistently to share the position outlined first above. What is interesting about this is that these two groups are the disenfranchised ones, whilst the blacks and Puerto Ricans are citizens and potentially politically potent. One might argue that the only way for Dominicans and Cubans to make it is to become mainstream, while the more politically secure groups can support a cultural pluralism in which subculture and allocation of resources have become separated. The situation is further compounded by the fact that we must consider not only the ethnicity of the child's family background but also the ethnicity of the child's social milieu; that is, the composition of his class, his peer group, his teachers, and the placement of his ethnic group in various neighborhood-defined hierarchies.

As much as we know about these groups, further research is required which will (1) ascertain a) what kinds of instructional settings are normal for various populations outside of school and b) what is the success of the various instructional settings in achieving their own goals, whether these goals are self-expressed or implicit. Identification of the impact of variables like socioeconomic status, language, cultural values, income, occupation, and religion therefore must be examined. (2) analyze the kinds of rewards and sanctions used in those settings and the styles of instruction in each. Data must be collected on a sufficient number of categories of educational settings to allow descriptions of the types of settings important for each of the migrant groups and the characteristics of instruction in each setting type for each group.

(3) ascertain on the macro level the effect migration has on educational processes in whatever setting they occur. Where possible, data relevant to pre-migrational instructional patterns must be collected, allowing gross comparisons of a pre-post migrational kind.

(4) discover the implicit cultural values what are relevant to schooling, specifically examining what is perceived to be important to learn and what is not. Which of two variables--language or cultural values--is the most powerful at predicting school failure or success? This particular point is instructive as to why the anthropological type study proposed is necessary to achieve the objectives we have set. Knowing from school records which language is spoken in the home and the birth place of the parents, one could rather easily assess which variable was more potent--if nationality were synonymous with ethnicity and cultural values. But it is not. Only by a thorough knowledge of the family based upon ethnographic data, can one hope to get to truly cultural variables.

(5) begin to understand the processes whereby children learn about their own ethnicity and the ethnicity of others. The following observations from our New York City field notes illustrate the kind of phenomena we need to be able to understand better:

among sixth graders:

> "A Cuban-Chinese boy is called 'Chino' by Dominican boys but not by Cuban boys." "Dominican boys never dance at class parties with U. S. born black girls, but dance with Dominican girls of the same skin color." "Friendship choices for girls tend to be across ethnic lines, while the choices of boys are almost always within ethnic lines.

for fourth grade:

> "The teacher starts a discussion about Dominican Independence Day and the Dominican leader Duarte. A Dominican boy asks the teacher if she is from the Dominican Republic. When she says no, Puerto Rico, he gives her a thumbs down sign and tells her that's bad ... Santo Domingo is better." "There is a lot of talk between boys about whose hair is getting long enough to be an Afro, and whether Afros are good or bad. The children's discussions center on the trouble of combing it; however, while a similar discussion among adults, i.e., mothers, has racial considerations (i.e., look like an African) as the dominant feature" (Harrington 1974).

Processes of development of such images in children and their consequences are important areas of study which have significance far beyond the particular setting under study.

(6) shed light on the consequences of stereotyping in the process of the classroom. Rosenthal's (1971) study made an empirical argument that stereotypies, in their case of pupil's ability, could become self-fulfilling stereotypes. Gumpert and Gumpert, while acknowledging defects in the statistical analysis of the Rosenthal book, find evidence to substantiate this point. Our study offers an opportunity to study the effects of ethnic stereotypes on the process of learning in the classroom, and outside the classroom. As the examples above indicate, the teacher is a major figure in the formation of ethnic identity in the children. We understand very poorly how this occurs.

c. Mexican-Americans

Recent research has presented interesting findings on Mexican-Americans, and has investigated specifically some of the factors influencing school performance which we discussed above. Specifically, research by Schwartz (1971) emphasizes that ethnicity must be defined by variables in addition to simple nationality labels. Her study compared Mexican-American and Anglo secondary school age children. She found high expectations of school attendance for both groups. She found that there was a higher generalized faith in mankind and more optimistic orientation toward the future among Anglos than the Mexican-Americans. These variables were also related to achievement. More important, she showed that within the Mexican-American group these values were not distributed evenly, and that Mexican-American pupils of higher socio-economic status are more similar to Anglos (Schwartz 1971).

Evans and Anderson (1973) while not examining variations within Mexican-Americans as did Schwartz, does find that stereotypes about this group held by educators and used to explain their relative failure are seriously in error. While the Mexican-American students did, more than Anglos, have lower self-concepts of ability, experienced less democratic parental independence training, had fatalistic present time orientations, had a high striving orientation, and lower educational aspirations, the Mexican-Americans were also found to come from homes where education was stressed, and parental encouragement was linked to values and experiences the authors link to the culture of poverty. Madsen and Kagan (1973) report a study of experimental situations in a small Mexican town and Anglos in Los Angeles. Mothers of both groups rewarded their children for success, but Mexican mothers more often gave rewards for failure than did Anglo mothers. Anglo mothers chose higher and more difficult achievement goals for their children. In another experiment Madsen finds that this training may have an effect, if the cross cultural evidence linking independence training to competition and "egoism" is correct. In a study of cooperative-competitive behavior in the same populations as the preceding study, he shows a higher level of cooperation among Mexican than among Anglo-American children, and increases in non-adaptive competition with age only for the Anglo group.

Other studies examining school achievement for Mexican-Americans show significant improvement in performance on performance and vocabulary measures for Mexican-American children in a planned bilingual early childhood program, compared with Mexican-Americans not directly involved, or those involved in traditional non-bilingual day care centers (Nedler and Sebera 1971). For older children Lugo (1971) explores the relationships between three degrees of bilingualism of Mexican-American pupils and various measures of school achievement. They found educators reported neutral attitudes toward bilingual education, and a general lack of knowledge concerning the Mexican-American. They conclude that the regular school program does not seem to be helping Mexican-American pupils to achieve school success regardless of his competence in English, birthplace, parental birthplace, sex, length of residency in the U. S., and aptitude. They argue that positive identification with one's culture is a powerful motivation for tested achievement. Self worth seems adaptive in the face of benign neglect, but how is it acquired? Padelford (1970) emphasized the importance of self-concept to reading scores for both Anglo and Mexican-American students, both middle and lower class. He also found that Anglo boys did better on both measures than Mexican-American boys, with no difference in levels between girls of the two groups.

d. Blacks

We have up to now explicitly been dealing with problems of migrant groups to urban areas. We turn now to a discussion of psychological anthropological studies of the group which (while migration is still occurring from the South) represents a more settled urban ethnic group: Blacks.

Several works have recently appeared on urban Blacks, but the most psychological anthropologically oriented is Hannerz (1969). The book is also interesting because it marks with Ogbu (1974) attempts by non-American anthropologists to come to grips with Black U. S. culture. Using the tools of the anthropologist, Hannerz describes life in the ghetto, but his particular interest is given to the development of male role behavior, a subject which also concerned Elliot Liebow in Tally's Corner. In fact, in one way or another, much of the anthropological literature about the urban black ghetto has centered on male role behavior, either of teenagers (Walter Miller, for example) or adults. Discussion of male role learning raises one of those classic and recurring questions for anthropologists who study complex societies. The dispute rages among the following three positions.

(1) Male behavior in a black ghetto is a deviant form of normal "mainstream" male role behavior. Black ghetto males are more aggressive and sexual because they are protesting their masculinity in terms defined as masculine by white, middle-class people. That they overdo their behavior into a caricature of the white, middle-class male role is attributable to their coming from a subculture where matrifocal families predominate, depriving the child of male role models, and their inability to successfully carry out instrumental aspects of the male role results from their lack of training and exclusion from jobs.

(2) Male behavior in a black ghetto is evidence of a ghetto specific or black culture specific see Young (1970) definition of maleness; the ghetto is simply a different culture from white, middle-class America. It is a mistake to interpret ghetto behavior as a reaction to or related to white, middle-class definitions. This is just the way ghetto males behave. Upholders of this position typically downgrade the "protest masculine" explanation as inappropriate, and also suggest it to be inaccurate since male influence in the ghetto is strong, particularly through extra-familiar groups.

(3) Male behavior in a black ghetto is merely a local expression of a "culture of poverty" which is found worldwide. The critical dimension here is that the state of poverty, in a culture in which wealth is also present, creates certain behavioral patterns which hold, regardless of what mainstream culture is like. Matrifocal households and aggressive males are part of this "culture," and are therefore to be expected in our black ghetto.

So we have in anthropology a choice, and increasingly a dispute between, respectively, the "subculture" (or subsociety), the "separate culture," and the "culture of proverty" schools in interpreting ghetto behavior. Liebow upholds the first position, and Valentine appears to learn toward it; Hannerz the second; and Oscar Lewis and his followers the third. Hannerz spends much of his book justifying his own position. But all three schools and the dogmas which surround them may block our understanding of life in a ghetto, or anywhere. The concept of culture, far from being the anthropologist's analytic tool can prevent analysis by obscuring what it is that we are talking about. Our job is to explain human behaviors by making use of anthropological theory and method. Specifically what we need are descriptions of behavior.

Hannerz suggests that ghetto sex role behavior cannot be accounted for as a protest of middle-class values. Following the discussion in II above, this explanation would require a dynamic of father absence leading to feminine identity and subsequent protest of hypermasculine traits, yet as Hannerz argues, there are men in the ghetto who could serve as role models. Hannerz uses this to argue against the subculture position, but his argument is misdirected. Hannerz is right, if not original, in asking why fixate on father absence in explaining sex role learning. As the literature above shows, why not father salience, mother salience, sibling presence and salience, peer groups, etc., not to mention effects of street society, power positions, etc.? But this has nothing to do with whether the black ghetto is a culture or a subculture.

As we have seen, there is a fair amount of psychological anthropology literature which talks about the effects of such variables regardless of a particular culture's definitions. What we need are studies which link these influences to behavior. In our anthropological studies of the urban ghetto, we must see to what extent our cross-cultural findings of the last fifty years, and our findings of the last twenty years in the fields of perception, cognition and socialization, can account for what we see in the ghetto. That is, rather than endless polemics about what kind of culture of subculture ghetto life is, or calls from Valentine for studies to test the point, we must get on with the business of understanding and predicting human behavior wherever it occurs. To say, as Hannerz does, that black male behavior is ghetto specific is not an explanation and is barely a description. But following an extensive ethnographic study to account for that behavior as a result of certain developmental and situational pressures which are themselves extensively treated and tests in anthropological literature is the kinds of contribution I hope to see come out of psychological anthropology.

Whether the black ghetto is a subculture, a culture, or a local manifestation of a culture of poverty is an important problem for educators, and each position can find its defenders. I think all three are true to a certain extent, which is why I think none of them means very much. What we need to do in anthropology, which will be useful to educators, is to understand contemporary human behavior, to specify the importance of what goes on outside of school to the learning of social behavior, studies of the techniques of instruction that exist there, and the processes of learning that are involved. In some ways we know more about Samoa than what happens six blocks east of my office. Yet once we have the answers, the question of what the school's role should be, if any, will be more easily answered.

Weisner (1973) reports on the effects of rural-urban migration in Kenya in a circulatory migration pattern of high mobility into and out of both rural and urban communities. He argues that residence at a particular point in time in either town or country appears to be less important in determining social attachments than are ties of clanship (sub-clan affiliation) and composite social status. He argues that the geographically dispersed rural-urban network is a non localized social unit that must be considered as a socially important adaptation during rapid social change. While Weisner's study properly belongs in the next section, it is included here for its conceptual relevance to problems of circulatory migration in urban U. S., the South, and the Caribbean.

e. Acculturation

Psychological anthropology, because it emerged within American anthropology, has spent much time investigating problems of acculturation as they occur in North American Indian cultures—a closeby "laboratory." A great deal of this research took place prior to the past twenty years and is usefully reviewed elsewhere (e.g., Honigmann 1972, Barnouw 1973, and for a bibliography, Haring 1956). Nevertheless studies of acculturation phenomena continue and certain recent studies have great relevance for education. While the field is not as dominated by North American Indian studies as it once was, there are still some imbalances. In the discussion that follows the discussion of social change will deal with psychological effects of experiencing change or acculturation. Personality variables which predict change and which are linked, some way casually, to it, are duly reviewed in the abstracts contained in the appendix.

We begin with a series of studies which examine stress as a consequence of acculturation. Berry (1970) argues that the psychological changes which result from culture contact and social change have in part been concerned with the concept of stress, particularly resulting from marginality. Data for acculturate Australian aborigines supported the marginality theory, and further showed that those rejecting the white society were those who exhibited the most marginality, most deviance, and most stress.

Graves (1970) has written with eloquence about the indians for whom urban migration is chosen as a result of inadequate economic opportunities on the reservation, and who then find the economic role of the migrant in the city to be only marginal (Sanday 1973 has gone so far as to call them culturally marginal). To this he attributes in large part, their extremely high rate of arrest in Denver, Colorado, for drinking and drinking related offenses. His ten year study of 259 Navajo male migrants reveals the economic, social and psychological pressures and constraints (see also Graves 1973). The film "The Exiles" is a useful concomitant to Graves work, although the scene changes to Los Angeles.

Trible (1969) has compared the psycho-social characteristics of employed and unemployed Western Oklahoma male Indians representing 19 tribes. Several salient differences were found which reinforce Graves thesis: While level of training and education were unrelated to employment status, self-concept variables were clearly linked.

Savishinksy (1971) discusses environmental as well as socio-cultural sources of stress that prove cumulative in a small village in Canada's Northwest territories. Stress producers include acculturation influences, a local feud, prolonged periods of bush isolation, and population concentration, and expectations and obligations for generosity and reciprocity. He argues that the annual cycle of bank dispersal coming together is adaptive to stress. Each new move ends tensions in the last period, each new phase creates new stresses to be released in the next part of the cycle. Savishinsky has no doubt that acculturation produces stress, but he places it in context with "naturally occurring stress" and shows a naturally occurring outlet.

On the other hand, Robbins (1973) describes a stiuation which lacks a natural cure, and he describes an increase in interpersonal conflict as a concomitant of economic change. He describes the drinking behaviors of the Naskapi indians of Quebec, Canada, and argues an increase in frequencies of identity struggles, and the development of ritualized or formalized social interactions which serve as identity resolving forums. He concludes (Robbins 1971) that drinking behaviors provide an area in which individuals can make status claims. Those who are successful wage earners (status used to be achieved through hunting) make such claims by gift giving. Those who are failures make status claims through aggressive behavior. Robbins argues then that aggressive drinking behavior provides the Naskapi with a means for resolving an identity he has not been able to achieve through the new economic channels. Robbins research is a cut above the usual linkages made between stress and "alcoholism" because of its analysis of the behaviors associated with drinking rather than drinking per se.

Savard (1969) is not as sophisticated in this respect, focusing as he does on a comparison of alcoholic and nonalcoholic Navajo men. However, one finding which does seem useful is his conclusion that the Navajo alcoholic seems to use alcohol not as escape but as a means of entree into social relationships. The important thing then was the group fellowship among drinkers, seen as countering an inability to function in as large a variety of social groups as nonalcoholics function in.

Levy and Kunitz (1971) argue that the feelings of anomie described above are not responses to acculturation, but should be seen rather as persisting elements of Navajo culture. However, Resnik and Dizmang (1971) link higher rates of suicide on Indian reservations to high collective helplessness and hopelessness. They identify the following factors as causal: breakdown of traditional values, geographic isolation, widespread unemployment, and high incidence of alcoholism, which seems to return us to where we began, since they do not over examine the behaviors that accompany drinking. Explanations of culturally sanctioned responses for dealing with stresses of acculturation, or other causes, are congruent with Whiting, et al. (1966) description of culturally sanctioned defense mechanisms for handling a failure to live up to cultural norms. A considerable promist for future research in this area can be assured.

Of course, not all cultures succeed in this and individual expressions of stress-induced anger are possible. Ackerman (1971) relates juvenile delinquency among Nex Perce indians to marital instability, loss of communal discipline, loss of patrilocality, and sex role definition changes. Hellon (1970) argues that "the process of acculturation of the Canadian aboriginal, with its invalidation of cultural controls, will result in those mental illnesses characterized by lack of impulse control." He finds high rates of personality disorders, violence and promiscuity in support of his theory. However, Boag (1970) feels that the social problems faced by arctic natives resemble those of under-privileged minorities elsewhere, and those of underdeveloped countries to western society. While traditional patterns of psychopathology are obscured by social change, they are replaced by familian identity and family disorganization pathologies. We have heard this debate before, and to make the linkage clear we might argue that for some theorists stress reactions are culture specific, for others they represent reactions to new role demands made by the larger society, and for others they represent yet another manifestation of a culture shared by poor minorities everywhere. Once again, a lot more data are needed to adequately sort out these processes.

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IV. Conclusions

The preceding will make clear that I perceive much of psychological anthropology to be relevant to education. My purpose in this concluding section is not to rehearse the points already made. Part I makes clear enough the development of the trends I see emerging in the study of perception and cognition which those interested in education should find valuable. We have emphasized the crucial role that culture plays in learning and thinking. We argued that the content of perception is culturally determined and culturally learned, and argued against assuming that biological differences can account for group differences in perception. We suggested that certain perceptual styles, emphases and skills are also culturally influenced, and not biologically determined. An understanding of these factors is important to a foundation of educational inquiry. Part II reviews research in socialization process emphasizing that education is embedded in a socio-cultural matrix. Providing a bridge between psychological and social anthropology, we argued that educational practices, in any given culture, arise from the requirements of the maintenance systems of that culture. School failure, we emphasized, cannot be discussed without examining the functions and interrelationships of the school in the larger society. In Part III we argued the importance of historical context (migration and change) and situational factors (minority status) as well. We also examined some specific researches with various groups for whom the educational literature has had some interest, and in some cases, preoccupation.

Rather than provide a detailed summary of what I have already written, my purposes in this concluding section are: 1) Recommend how psychological anthropologists might more effectively influence educational research, 2) build on the material already presented some delineation of priority problems in education, and 3) as overview, take up a fundamental criticism which might appear to argue that psychological anthropology, despite what has said here, does not have relevance to the study of education. I will discuss each of these in turn.

How Psychological Anthropology Can Influence Education

The methods and theories of psychological anthropology have produced enough research to convince me of their importance to educational inquiry to move us in a direction where we will be better able to deal with educational problems. But this promise can be achieved only if there are more overt linkages, and more involvement of the psychological anthropologists in applied research. Several years ago, when discussing the need for anthropologists to do research in their own society, Paul Bohannan argued that anthropologist had contented themselves with a smug certainty of the value of their research to understanding our own culture, thinking the relevance of their investigations for sociologists and psychologist in the U. S. to be obvious. Anthropologists soon recognized that while their work was not totally ignored, it was nevertheless true that if they wanted research of a particular type done in the U. S. they were going to have to do it themselves. Similarly, up to now, psychological anthropologists have been content to do their research confident that their work's significance to others would be so obvious that e.g., educators would apply their anthropological findings in the formulation and construction of their own research. This left the psychological anthropologist free to pursue his "pure research" into the lead and made explicit use of his good works. There is little to justify this chauvinism. Anthropologists have had an affect (Albeit uneven--see LeVine 19) on a small group of cross-cultural psychologists (see e.g., Berry & Dasen 1973, Berry & Witkin n.d.) but these have not, in turn, been influential in education. Frankly, the time has come for researchers to accept the fact that it is up to them to demonstrate the relevance of their work to educational researchers and educational policy makers. If they do not, no one else will. And by demonstrate I mean demonstrate, not simply pleading for its importance and pointing to its significance. This puts more burden on the anthropologist, to be sure, but to want to have an effect and not take an active role, is self delusion.

In a sense, this is, for me, the most painful part of the exercise I have undertaken here for the National Academy. I really do believe that so much of the literature I have reviewed here is directly and urgently needed by and relevant to educators, yet I have no confidence that simply asserting and explaining will have any effect. Too many will find it "very interesting" and then go on exactly as before, doing the things they were trained to do, not what needs to be done. In presenting the ideas reviewed here in various educational settings over the years, I have become more convinced of the need for direct involvement. The problems out there facing policy people are real and immediate. Other disciplines have promised "quick" and often "dirty" results. Anthropology is a time consuming discipline. It questions basic principles in its cross-cultural stance that other disciplines simply take for granted along with the policy people. Unless we become directly involved, it is easy to ignore our ideas as untested and us as aliens. The futility of authoring this paper is summed in the phrase, "will anyone listen?"

And the deafness is not just in the camp of the non-anthropologist. Will the psychological anthropologist, comfortable in his academic department, leave its safety for a tour of duty at "the education school?" I know of one anthropologist dearly interested in doing applied educational research who restrains himself lest he jeopardize his chances for tenure at a large prestigious department. All academics seem willing to be applied researchers in the "relevance" sections for their grant proposals, but few follow up and test the real importance of their research. We argued above that the educational institutions of a society could only be understood within the total sociocultural context within which they occur. Within that framework it is fair to ask why does our academic society continue to perpetuate the myth and stigma of poor quality research in education (ample evidence existing for both sides of the question)? Is it important to a conservative educational establishment to keep the innovative, creative, "quality" people out? Why did a leading sociologist tell me recently that he was free to indulge his interests in education only after establishing his reputation as pure sociological researcher, a not unusual pattern. Why does the academic community exact such a penalty from the scholar who is concerned with the implications of his results that he dares risk it only when "established"? Is it because it wants to protect young scholars from the dangers of being seduced into evaluative and contract research away from theoretically important problems, or is it instead its own symbol system necessary for placating academics' consciences when they are troubled by the problems that face us. There was after all really "nothing we could do." Or are we unwilling to tackle large problems lest we find and lose confidence in the relevance of our mission to solving problems? While one may want to distinguish between research and the application of its results (although the former without the possibility of the latter is hard to contemplate), there is no such thing as totally "pure" research. Yet the myth persists, and the more pure is the more holy.

The final irony in the myth system is that applied research is accused as selling out to the "system." In an era of Project Camelot, the CIA, Watergate, and big government, applied researchers are suspected (by Battilla among others) as oiling the creaking gears of the big oppressive machine. Rather than seeing that the degree to which this has been true in the past results from the self selection processes described above, it is used to provide additionally negative loadings for the applied researcher. This necessitates a double think in the ranks. Getting a grant from NIMH is not selling out or researching for the system, but working for NIMH is, etc. Until we break through some of these myths, few psychological anthropologists (this applies to several disciplines new to education) may be willing to undergo the penalties. Until they do, none is likely to have much impact.

Research Priorities

Much of the work reviewed in Part I leads toward improving our ability to recognize, discover, and measure human diversity in diverse populations. Such work is badly needed when compared with the unidimensionality and culture boundedness of current practice. One has but to watch a Spanish-speaking child in New York City being assigned to a grade or track on the basis of his performance on an English reading test to know how much room there is for improvement. The research and methodologies reviewed above can provide us with the ability to do research on diverse cognitive and behavior styles. It would make more likely research which does not confuse differences with deficit; research which is sensitive to the meaning and consequences of ethnicity, and how ethnic cues are learned; research which investigates a diversity of learning styles and strategies and their relationship to various kinds of "academic" performance, not one arbitrary standard.

Research in Section II above leads us to further research in the nature and diversity of educational environments, in school and out, and how these factors interact with factors mentioned in the previous paragraph. Here to is research which asks "What are the goals of education for individuals and populations?" For our own society, Peggy Sanday (1973) has recently distinguished cultural pluralism form structural pluralism. Cultural pluralism is a cultural diversity and a difference brought about by differences in group norms resulting in different behavioral styles among various ethnic and linguistic groups. Group identity is nourished and homogenization eschewed. Structural pluralism is the differential incorporation of various populations categories into the opportunity structure of the society. Academically it is easy to distinguish between the two. It is easy to talk about maintaining cultural differences while at the same time providing the learning required to successfully compete for resources and thereby avoid cultural pluralism from turning into structural pluralism, but is it in fact practical in a society so used to differentially incorporating race and sex and nationality populations in its opportunity structure? Indeed, an important research question is "What are the consequences for children who recognize that the groups to which they belong do not participate fully in the opportunity structure?" We return to this below.

Part III emphasized the importance of examining the affects of historical and sociocultural factors external to the group studied specifically the history of migration, and the placement of a cultural group in acculturation positions. These researchers emphasize the importance of examining the effects of migration, ethnic, and culture contact phenomena on individuals and groups and through them on education. What are the prerequisites for functioning in these situations? Are they acquired equally for all groups? How? And the motivational consequences of imbalances in the distribution of education and other resources all comprise priorities for research developing out of Section III.

Research in Part III also reminds us that anthropologists have developed three perspectives on behaviors observed in these kinds of settings. Some see them as reactions against or corruptions of the dominant or mainstream culture, some as expressions of a uniquely different e.g., "ghetto specific" cultures, and others as expressions of a culture of poverty.

Ogbu (1974) for example finds for blacks and Mexican-Americans in California that his results in an adaptation of school failure specific to these groups. Since "they have been given inferior education and those among them who managed to receive good educations have been excluded from the social and economic rewards awarded to whites...Blacks responded, more or less unconsciously, by reducing their efforts in school tasks to the level of rewards they expected as future adults. This mode of adaptation results in a high proportion of school failure" (Ogbu, 1974:211). For blacks this adaptation reduces the pain of working as hard or harder than do whites for fewer rewards. For whites, this adaptation provides an excuse for the uneven allocation of resources by showing that "they" just can't make it, giving rise to the perseverance and popularity of Jensenist theories about inferior ability. We turn to Ogbu's analysis now as it raises the question: "Is there room for psychologizing in an anthropology of education?"

OVERVIEW

For Ogbu, "Burgherside" children fail, in part, because of the attitudes held by the school staff toward them, and fundamentally because the school system treats the school failure adaptation, which he describes for the group, in what Ogbu labels "psychological and clinical terms," rather than as a syndrome embedded in the structure of the larger society. Ogbu dismisses these psychological and clinical explanations (e.g., those that talk of cultural deprivation, school inferiority, or genetic inferiority). For him the real source of school failure is the unequal rewards distributed for education by the larger society. With that view, for Ogbu psychological research is reductionist and ignores the predominant social reality: the pervasiveness of the subordination of minority groups in the larger society. However, like so many (dare we say Marxists?) who eschew psychological accounts (mentalism!) Ogbu's replacement is itself a psychological theory, and a largely untested one at that. He is asserting that there is an impact of prejudice and unequal allocation of resources on motivation to learn, and motivation is surely a most psychological concept. Ogbu's explanations, rather than throwing out psychological accounts, instead call for better psychologizing to enable the examination of the phenomena he describes. In other words they require psychological anthropology to attend to situational and historical factors and not to be rigorously childhood deterministic. We need to learn more about competence motivation, and how children respond to diverse competence feedbacks. We need to investigate more than ever how people handle conflicts between the ideal and the real, frustration of goal and self concept formation. These are social psychological phenomena, and perhaps it is long over due that psychological anthropologists interacted with social psychologists as much as they have in the past with cognitive and developmental psychologists.

Ogbu is undeniably right when he calls for greater attention to the historical context. We have tried to do something of the same thing in Part III above, suggesting ways by which psychological anthropologists have and could examine such phenomena. Psychologizing about blacks without taking such factors into consideration is reminiscent of several past debates in anthropology about the relative importance of childhood vs. situational or historical accounts. It is perhaps useful to review two of them here to emphasize that psychological anthropology has been attentive to this issue, and as a field is not concerned with constructing a single minded diaperology, but rather with a more eclectic view of man.

In 1958 G. Morris Carstairs described Hindu males as hostile, paranoid, and suspicious--quite the opposite of the Gandhi image most Americans had come to accept.* He related his findings to a single minded application of classic Freudian theory, the while oblivious of the fact that he, a white physician and a colonial to boot, was doing his research in immediately post independence India! Did one need to seek out early infancy explanations of suspicion and distrust, or would a more parsimonious account talk about how people would likely relate to him at that time and place? There are many other instances in the book in which obvious historical accounts are ignored and Freudian accounts produced with single minded devotion. For example, the Hindu refusal to eat meat is explained as a repression of his desire to eat his father's penis. Such diaperology howlers as this were thoroughly explored in M. Opler's review of Carstairs' book (Opler 1959, 1960, see also Carstairs 1960).

Douglas Haring was disturbed by accounts of Japanese national character which emphasized Freudian or developmental theory to the exclusion of situational and historical factors. He argued that the Japanese national character, to be understood, had to be viewed as an adaptation to life in a totalitarian police state (Haring, 1953, 1956). Much as Ogbu was to argue

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*Whiting 1966 offers some later data which bear out some of Carstairs' claims about hostility and aggression.

20 years later for blacks, Haring, a psychological anthropologist, was arguing that much psychological anthropology research was ignoring the predominant social reality: the pervasiveness of the police state techniques for maintaining order.

Now while it is fair to say that the field of psychological anthropology as a whole has emphasized some factors to the detriment of others, it is not fair to assert that psychological anthropology has no relevance because of this imbalance. There are tools, and there is an existing literature which does focus on the relevant and the important variable, as we have strived to show throughout this report. The literature also makes clear that it makes little sense to revert to an opposite stance by ignoring childhood developmental factors in the many situations in which they have been demonstrated to have an effect. Part of the research question to be answered for particular problems is which kinds of variable are having the most potent effects for the phenomena under investigation. Regrettably, however, this openness is sometimes obscured by polemic. For example, shortly after Haring's position was reported, Geoffrey Gorer, an English diaperologist, published a paper linking English national character to the London bobby! Haring (personal communication) felt bitterly that this was a caustic attempt to satirize and misrepresent his viewpoint.

Suffice it to say here then that psychological anthropology has been willing to acknowledge the legitimacy of historical or situational accounts (see Barnouw 1973, Chapter 1 for example). Since these factors seem very much, for our own society's minorities, a significant part of the input into how learning and thinking are structured, the attention of psychological anthropologists to such phenomena, perhaps in collaboration with different kinds of psychologists than we have been used to, is a priority of future research.

This leads inevitably to the question "What are the goals of any educational assessment?" Assuming that our theory is sophisticated so that we can find out what is important to measure, and how to measure it for whatever group of interest, why are we doing this research? Are we discovering talent, or providing the larger society with another excuse for discriminating against those said to lack it. Are we helping developing countries best utilize their scarce educational resources by putting its money where it is most likely to win, or are we helping it rationalize its inability to serve 90% of its population? Are we searching for information and data to foster and improve the likelihood of cultural pluralism and diversity, or are we engaged in more label making and stereotyping, to which others can apply negative loadings? We cannot ignore these dangers.

The research reviewed above from psychological anthropology seems therefore to call for the following programmatic priorities to which the Committee on Anthropology and Education should want to turn its efforts:

1) increasing the diversity of educational environments to increase the likelihood of children finding one within which they can function;
2) increase the diversity of methods of research by securing funding for research combine more standard anthropological techniques with longitudinal, experimental and quasi-experimental designs.

3) increase the diversity of research personnel so as to increase the number of disciplines represented, and involve the people being studied in the decisions that will ultimately concern them;

4) increase the number and diversity of educational outcomes sought for assessment, and the procedures for measuring them;

5) nurture the legitimacy of multiple educational outcomes that foster cultural diversity without reinforcing structural pluralism;

6) insist on curriculum definitions that allow the examination of what goes on in school as part of a larger context--the rest of the child's life--and the rest of American Society, or whatever society the research is in;

7) encourage the involvement of "mainstream" psychological anthropology in education programs and break through the self-fulfilling prophecy syndrome of the quality of education research.

IV. REFERENCES

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1955 Modification of National Character: The Role of the Police in England. The Journal of Social Issues, Vol. II, #2, pp. 24-32.

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1974 The Next Generation. New York: Academic Press.

Opler, M.
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Sanday, P.
1973 Cultural and Structural Pluralism in the United States. MSSB Conference on the Contribution of Anthropology to Social Policy Planning. Philadlephia, Pennsylvania, October.

Whiting, Beatrice
1965 American Anthropologist: Sex Identity Conflict and Physical Violence: A Comparative Study. American Anthropologist 1967:123-140.

APPENDICES*

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*Author or journal abstracts have been used where they are available and intelligible. They are marked AA and JA respectively. Some sources especially in Appendix A remain to be abstracted.

APPENDIX A: SELECTED ADDITIONAL SOURCES AND ANNOTATIONS--PERCEPTION AND COGNITION

Al-Issa, I., and W. Dennis

1970 Cross-Cultural Studies of Behavior. New York: Holt, Rinehart, & Winston.

Almy, M.

1970 The Usefulness of Piagetian Methods for Studying Primary School Children in Uganda. In Studying School Children in Uganda. M. Almy, J. L. Duritz, and M. A. White. New York: Teachers College Press.

A. Barclay, and D. R. Cusumano

1967 Father Absence, Cross-Sex Identity and Field Independent Behavior in Male Adolescents. Child Development 38:243-50.

Berlin, B., and A. K. Romney

1964 Descriptive Semantics of Tzeltal Numberal Classifiers. In Transcultural Studies in Cognition. A. K. Romney, and R. G. D'Andrade, Eds. American Anthropologist 66:79-98.

Bruner, J. S., and R. R. Oliver

1963 Development of Equivalence Transformations in Children. Monograph. Society for Research in Child Development 28:k25-143.

Campbell, D. T.

1964 Distinguishing Differences in Perception from Failures of Communication in Cross-Cultural Studies. In Cross-Cultural Understanding: Epistemology in Anthropology. F. S. C. Northrop, Ed. New York: Harper & Row, pp. 308-366.

Campbell, D. T., and J. C. Stanley

1966 Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally.

Chandra, Subhas

1972 An Assessment of Perceptual Acuity in Fiji: A Cross-Cultural Study with Indians and Fijians. Journal of Cross-Cultural Psychology 3:401. 110 Indian and 83 Fijian Ss of ages 15 through 20 were administered Gough and McGurk's 30-item visual Perceptual Acuity Test (PAT). In accord with prior findings in French, Italian, Swiss and American applications, scores correlated significantly with age (r=.26); in addition, mean weighted scores increased for each older subsample by age. Insignificant differences in performances were observed between Fijian and Indian Ss, and between two small subsamples of delinquents and nondelinquents matched for age. Sex was related to performance, with men attaining higher scores. PAT performance was essentially unrelated to school achievement, and to ability as measured by Raven's Matrices. It may be concluded that the PAT is a promising device for cross-cultural study of age gradients in the development of perceptual acuity.

Cheng, Tsu-Hsin, and Mei-Ke Lei

1960 An Investigation into the Scope of the Conception of Numbers among 6-7 Year Old Children. Acta Psychological Sinica 1:28-35.

Cole, Michael, John Gay, and Joseph Glick

1968 A Cross-Cultural Investigation of Information Processing. International Journal of Psychology 3:93-102.

One hundred and twenty American Ss (Yale students, seven to nine and ten to twelve year olds) were compared with 120 illiterate adults, school children, and illiterate children of the Kpelle tribe of Liberia on number recognition of random and patterned dots. Although American subjects were significantly more accurate than Kpelle Ss, the results can be variously interpreted, e.g., in terms of differences of informational requirements of the two cultures. Study of relationships of performance with a culture may aid in eventual treatment of differences between cultures. However trivial, alternatives are not likely to account for these patterns of results. AA

Cole, M., J. Gay, and J. Glick

1968 Reversal and Nonreversal Shifts among a West Agrican Tribal people. Journal of Experimental Psychology 76:323-324.

Conklin, H. C.

1955 Hanunoo Color Categories. Southwestern Journal of Anthropology 11:339-344.

Cryns, A. G. J.

1972 African Intelligence: A Critical Survey of Cross-Cultural Intelligence Research in Africa South of the Sahara. Journal of Social Psychology 57:283-301.

Dasen, P. R.

1970 Cognitive Development in Aborigines of Central Australia: Concrete Operations and Perceptual Activities. Ph.D. Thesis, Australian National University, Canberra.

Dawson, J. L. M.

1963 Psychological Effects of Social Change in a West African Community. D. Phil thesis, University of Oxford.

1966 Kwashiorkor, Gynaecomastia and Feminization Processes. Journal of Tropical Medicine and Hygiene 69:175-179.

1967a Cultural and Physiological Influences upon Spatial-Perceptual Processes in West Africa. Parts I and II. International Journal of Psychology 2: 115-128 and 171-185.

DeLacey, P. R.

1970 A Cross-Cultural Study of Classificatory Ability in Australia. Journal of Cross-Cultural Psychology 1:293-304.

Classificatory tests based on those of Piaget and Inhelder were administered to four groups of 6-10 year old Ss: aborigines with and without extensive contact with European children living in Australia. Only a small subsample of high-contact aborigines performed on a par with the European children, leading to the interpretation that environmental differences were the major influence in the performance differences found. JA

DeLacey, P. R.

1971a Classificatory Ability and Verbal Intelligence among High-Contact Aboriginal and Low-Socioeconomic White Australian Children. Journal of Cross-Cultural Psychology 2:393-396.

DeLemos, M. M.

1969a Conceptual Development in Aboriginal Children: Implications for Aboriginal Education. In Aborigines and Education. S. S. Dunn, and C. M. Tatz, Eds. Melbourne: Sun Brooks, pp. 244-263.

1969b The Development of Conservation in Aboriginal Children. International Journal of Psychology 4:255-269.

1973 The Development of Spatial Concepts in Zulu Children. In Culture and Cognition: Readings in Cross-Cultural Psychology. J. W. Berry, and P. R. Dasen, Eds. London: Methuen & Co. Ltd.

Dempsey, A. D.

1971 Time Conservation Across Cultures. International Journal of Psychology 6:115-120.

Dennis, W. and R. W. Russell

1940 Piaget's Questions Applied to Zuni Children. Child Development 11:181-187.

Dubreuil, G., and C. Bosclair

1960 Le Réalisme Engantin à lat Martinique et au Canada Français. Etude Genetique et Experimentale. In Thought from the Learned Societies of Canada. Toronto: Gage pp. 83-95.

1966 Quelques aspects de la Pensée Enfantine à la Martinique. In Les Sociétés Antillaises: Etudes Anthropologiques. J. Benoist, Ed. Department of Anthropology, University of Montreal, pp. 79-99.

Eells, K. W., A. Davis, R. J. Havighurst, R. W. Tyler, and V. E. Herrick

1959 Intelligence and Cultural Differences. Chicago: University of Chicago Press.

Etuk, E.

1967 The Development of Number Concepts: An Examination of Piaget's Theory with Yoruba-Speaking Nigerian Children. Ed.D. dissertation, Teachers College, Columbia University.

Fitzgerald, L.

1969 The Use of Psychological Testing in Rehabilitation Planning for Alaskan Native People. Australian Psychologist 4:146-152.

70 Native Alaskans were individually administered either the WAIS (N=42) or the Revised Beta Test (N=28) to determine rehabilitation guidance possibilities. Results indicate that while scores on subtests of the Revised Beta test did not differ significantly, poorest scores were in the area of visualization of similarities and dissimilarities and in the ability to envision a whole from the parts on a two-dimensional plane. The WAIS Performance IQ scores were significantly higher than Verbal IQ scores, with highest scores in the Object Assembly subtest and lowest scores in the Arithmetic subtest. Results support the "impression that the Alaska Native has a greater facility in the handling of concrete problems." It is concluded that

while an IQ test alone cannot measure the abilities of native Alaskans, a good test can be useful in evaluating rehabilitation potential by providing a distribution of abilities and an indication of the degree to which such abilities differ from a normative population. JA

Foster, George M.

1973 Dreams, Character, and Cognitive Orientation in Tzintzuntzan Ethos 1:106

The thesis advanced in this paper is that dreams in Tzintzuntzan, Michoacan, Mexico, when analyzed for manifest content, reflect remarkably accurately large areas of basic character and collective cognitive orientations of the villagers.

French, D.

1963 The Relationship of Anthropology to Studies in Perception and Cognition. In Psychology: A Study of A Science, Vol. 6. S. Koch, Ed. New York: McGraw Hill. pp. 388-428.

Gay, J., and M. Cole

1967 The New Mathematics and an Old Culture. New York: Holt, Rinehart, & Winston.

Gladwin, T.

1970 East is a Big Bird. Cambridge, Massachusetts: Harvard University Press

Gladwin, T., and W. C. Sturtevant

1972 Anthropology and Human Behavior. Washington: Anthropological Society of Washington.

Gluckman, M.

1944 The Logic of African Science and Witchcraft. Rhodes-Livingstone Journal 1:61

Goodnow, J. J.

1969b Problems in Research on Culture and Thought. In Studies in Cognitive Development: Essays in Honor of Jean Piaget. In D. Elkind, and J. H. Flavell, Eds. New York: Oxford University Press. pp. 439-462.

Gorsuch, Richard L., and M. Louise Barnes

1973 Stages of Ethical Reasoning and Moral Norms of Carib Youths. Journal of Cross-Cultural Psychology 4:283

Ethical development was investigated in a cross-cultural context by examing both the cognitive structure of ethical reasoning and the content of perceived moral norms in Carib boys. No evidence was found for the position that the stages might be a function of cultural norms. Other results were also as expected by stages theory: villagers were at a lower stage than the older youths. However, only the first two cognitive stages were found and the cultural invariance of the perceived moral norms was as great as that of the stages. AA

Greenfield, P. M., and J. S. Bruner

1966 Culture and Cognitive Growth. International Journal of Psychology 1:89-107.

Hallowell, A. I.

1951 Cultural Factors in the Structuralization of Perception. In Social Psychology at the Crossroads. J. H. Rohrer, and M. Sherif, Eds. New York: Harper & Row.

Handel, Amos

1973 The D 48 as a Measure of General Ability Among Adolescents in Israel: one sample of 557 boys from grades 7 to 11 and three samples of seventh grade pupils with n's of 127, ?950 and 161. The results showed a progressive increase of D 48 means from grades 7 to 11 and concurrent validities of .46 to .59 against difference criteria of seventh grade scholastic achievements. Highly similar validity coefficients were found in other countries. Cross-culturally equivalent data were also found for the correlation of the D 48 with the Progressive Matrices and for the order of difficulty of the D 48 items. The results support the suitability of the D 48 as a cross-cultural measure of the general ability in terms of these circumscribed aspects and suggest the promising potential in terms of tests similarly based on a cross-culturally common background of perceptual experience.

Harkness, Sara

1973 Universal Aspects of Learning Color Codes: A Study in Two Cultures. Ethos 2:175

The research described in this article addresses itself to questions such as: if color lexicons do evolve in a stable order, then might there be some cognitive logic behind it? For instance, do children learn colors in "evolutionary order"? Are there differences in adults' knowledge of color terms in their own language? How do various colors function cognitively for both children and adults? And, finally, why do some cultures have more basic color terms than others?

Hart, J. A.

1965 A Study of the Cognitive Capacity of a Group of Australian Aboriginal Children. M. A. qualifying examination thesis, University of Queensland.

Heron, A.

1968 Studies of Perception and Reasoning in Zambian Children. International Journal of Psychology 3:23-29.

Heron, Alstair

1971 Concrete Operations, "g," and Achievement in Zambian Children. Journal of Cross-Cultural Psychology 2:325.

A comparison is made between Zambian elementary school children in the range of "stated ages" 7-17 years who provided evidence of weight conservation behavior and those who did not do so. The principle dependent variable is performance on locally-developed psychometric measures of reasoning ability, and further data were availabe in the form of scores on an objectively-marked national Secondary School Selection examination. Very little connection is found between the conservation-status of the subjects and their performance on these variables, and the implications for a possible reapproachement between psychometric and Piagetian approaches to human intelligence are discussed in the light of cultural factors. An experimental approach to the problem is recommended. AA

Irvine, S. H.

1967 How Fair is Culture? Factorial Studies of Raven's Progressive Matrices in Africa. International Workshop on Educational Testing. Berlin: Padagogisches Zentrum.

Irvine, Sidney H.

1969 Figural Tests of Reasoning in Africa: Studies in the Use of Raven's Progressive Matrices Across Cultures. International Journal of Psychology 4:217-228.

Experiments involving Ss from various educational groups in Africa and Great Britain, using Raven's Progressive Matrices, compared item difficulty and describe strategies employed. Factorial analysis shows that environmental variables, whether verbally loaded or not, are not associated for central African Ss. Cross-cultural analysis reveals that item difficulties change from culture to culture, and that test scores approach Western patterns as the groups adopt Western value systems. Appearance of differing individual strategies in problem solving renders it unwise to assume that the same total score provides evidence of identical samples of psychological behavior. Research with African Ss shows "that sources of variance exist that call for some revision of...assumptions about the reduction of cultural bias in figural test items." JA

1969b Culture and Mental Ability. New Scientist 42:230-231.

Jahoda, G.

1970a A Cross-Cultural Perspective in Psychology. The Advancement of Science 27:1-14.

Kellaghan, T. P.

1965 The Study of Cognition in a Non-Western Society with Special Reference to the Yoruba of South Nigeria. Doctoral thesis, University of Belfast.

Kelly, M. R.

1971 Some Aspects of Conservation of Quantity and Length in Papua and New Guinea in Relation to Language, Sex and Years at School. Territory of Papua and New Guinea Journal of Education 7:55-60.

Kibuuka, P. M. T.

1966 Traditional Education of the Baganda Tribe. Unpublished MS, National Institute of Education, Makerere University.

Kidd, A. H., and J. L. Rivoire

1965 The Culture-Fair Aspects of the Development of Spatial Perception Journal of Genetic Psychology 106:101-111.

Kilbride, Janet E., Michael C. Robbins, and Philip L. Kilbride

1970 The Comparative Motor Development of Baganda, American White, and American Black Infants. American Anthropologist 72:1422-1428. Examined the developmental motor quotients (DMQs) of 71 male and 92 female 1-24 month old rural Baganda infants. Ss were found to be significantly more advanced in motor development in the 1st year of

life when compared to the sample of white and black American children studies by N. Bayley (see PA, Vol. 39:11902). Although the Ss were not as precocious as M. Gerber's sample of Uganda infants, the same downward trend in degree of motor development during the second year of life was found. As age increased, DMQ decreased, but at the age of 24 months, Ss still obtained an average DMQ higher than either American sample. Several interpretations of these results are considered. JA

Kuczynska-Stoffels, M. J.

1970 Figurative Responses of Congolese to the Lowenfeld Mosaic Test. Revue de Psychologie Applique 20:41-57.

Reports results of administering the Lowenfeld Mosaic Test to 662 Congolese 7-30 year old Ss (313 were between the ages of 8-10 inclusive). The proportion of figurative responses was low. Specific figures of 10-year old Congolese are found among 5-year-old Europeans. The theme most common both in Europe and in the Congo is that of a "home." Distinctive themes preferred by Europeans--trees, plants, flowers, animals and human beings--do not seem to inspire Congolese. JA

Kundu, Chuni L.

1970 Comparison of Intelligence Test Scores of Bhil and High Caste Hindu Delinquents and Nondelinquents. Journal of Social Psychology 81:265-266.

A cross-cultural study was conducted to determine whether there are significant differences in intelligence test scores between delinquents

and nondelinquents belonging to two strikingly different cultural groups--one from the high caste Hindu communities, and the other from jungle-dwelling illiterate Bhil tribesmen. Significant differences were found at .01 levels on Batia's Battery of Performance Test of Intelligence. AA

Kugelmass, Sol, Amia Lieblich, and Chedvah Ehrlich

1972 Perceptual Exploration in Israeli Jewish and Bedouin Children. Journal of Cross-Cultural Psychology 3:345.

A sample of 104 Israeli Bedouin children were tested in an attempt to clarify further the factors influencing developmental trends in visual perception exploration. In addition to a further demonstration of the influence of the specific characteristics of the language of school instruction, the findings suggest the importance of extra-school reading opportunities. A discrepancy between two indices of perceptual exploration was related to different aspects of reading development. While the Bedouin children's perceptual exploration might be considered less mature in some ways related to reading, this was not the case with other aspects of perceptual exploration.

Lesser, G. S., G. Fifer, and D. H. Clark

1965 Mental Abilities of Children from Different Social Class and Cultural Groups. Child Development Monograph 30.

LeVine, R. A.

1970 Cross-Cultural Study in Child Psychology. In Carmichael's Manual of Child Psychology, Vol. 2. P. H. Mussen, Ed. New York: Wiley. pp. 559-612.

Lloyd, B. B.

1972 Perception and Cognition: A Cross-Cultural Perspective. Harmondsworth: Penguin Books.

MacArthur, Russell S.

1969 Some Cognitive Abilities of Eskimo, White and Indian-Metis Pupils Aged Nine to Twelve Years. Canadian Journal of Behavior Science 1:50-59.

Factor analysis of ability tests for Eskimo, White and Indian-Metis pupils 9-12 years of ages, indicated for each sample two highly correlated oblique factors labelled v:ED and reasoning from non-verbal stimuli: when native Ss were scored on white T-score norms, least ethnic differences and least decline with age relative to white Ss occurred in the latter abilities. Written memory was an outstanding exception. There was almost no sex differences of the sample.

Mallory, Sadie A.

1970 Effect of Stimulus Presentation on Free Recall of Reflective and Implusive Mexican-American Children. Journal of Psychology 76:193-198. Identified 19 reflective and 19 impulsive second grade Mexican-Americans by the Matching Familiar Figures Test. One-half of each group was presented auditorily or audiotactually a twelve-word noun list. Free recall was significantly better for clustering and total words for audiotactual reception. Reflectivity and impulsivity did not influence free recall responses. AA

Martin, William A.

1969 Word Fluency: A Comparative Study. Journal of Genetic Psychology 114:253-262. A slightly adapted version of Thurston's word fluency test was administered to several groups of Maori and European high school children (n=143). It was found that the Maori had a significantly higher word fluency (Factor w) than their European counterparts; that the female pupils had, on the average, higher word fluency scores than males, and that the racial differences revealed that this held true within sex, as well as urban and rural categories. This Maori superiority could not be explained in terms of intelligence, sample selection bias, or verbal ability, nor could it be attributed to their greater age alone. Some evidence was found which suggested that this word fluency superiority derived from a definite intellectual ability.

Masland, R. L., S. B. Sarason, and T. Gladwin

1958 Mental Subnormality: Biological, Psychological and Cultural Factors. New York: Basic Books.

Miller, G. A.

1962 Psychology: The Science of Mental Life. New York: Harper & Row

Myambo, Kathleen

1972 Shape Constancy as Influenced by Culture, Western Education, and Age. Journal of Cross-Cultural Psychology 3:221.

Shape constancy responses, obtained by asking Ss to match the shape of an inclined circular test object with one of a series of comparison ellipses, were obtained for adult groups of educated Senas, uneducated

Senas, and educated Europeans, as well as for uneducated Mang'anja children between the ages of 5 and 15 years and Mang'anja adults. The uneducated African Ss tended to respond to the true shape of the objects regardless of age while the European Ss tended to respond to the retinal image shape; the educated Africans gave responses which were intermediate between those of the uneducated Africans and the educated Europeans. The differences between African Ss and European Ss on shape matching responses were believed to be due to cultural influences, but it could not be determined by the present shape matching method whether the response differences were due to differential responding to the instruction by the cultural groups or to differences in perception.

Noesjirwan, Jennifer

1970 Attitudes to Learning of the Asian Student Studying in the West. Journal of Cross-Cultural Psychology. 1:393

An hypothesis that the Asian student has an attitude to learning that is markedly different from his Western counterpart is presented. He is more dependent on authority, less able to think independently, and more dependent on memorization. Such an attitude is an impediment to successful academic performance in a Western university. A questionnaire measuring various aspects of this attitude was administered to a group of Asian students and to a similar group of Australian students. The items were subjects to a components analysis and three factors were extracted. The first two factors described the attitudes as hypothesized,

and both significantly discriminated Asian from Australian groups. The First Factor was found to predict academic performance for the Asian group to a significant extent.

Nurcombe, B.

1970a Deprivation: An Essay in Deprivation with Special Reference to Australian Aborigines. Medical Journal of Australia. 2:87-92.

1970b Precausal and Paracausal Thinking. Concepts of Causality in Aboriginal Children. Australia and New Zealand Journal of Psychiatry 4:70-81.

Otaala, B.

1971 The Development of Operational Thinking in Primary School Children: An Examination of Some Aspects of Piaget's Theory among the Iteso Children of Uganda. Ph.D. Thesis, Teachers College, Columbia University.

Pande, C. G.

1970 Sex Differences in Field Dependence: Confirmation with Indian Sample. Perceptual & Motor Skills 31:70.

Administered H. A. Witkin's colored Embedded-Figures Test (EFT) to 70 male and 70 female undergraduates to find whether sex difference in field-dependence, observed earlier, also exists for an Indian sample. Women were found to be significantly more field-dependent than men as found in earlier investigations with American and Western European samples. Some differences from Witkin's original results are demonstrated. Ss' consistency throughout the trials of EFT and its reliability as a measure of field-dependence are noted. AA

Peluffo, N.

1967 Culture and Cognitive Problems. International Journal of Psychology 2:187-198.

Pomerantz, Norman E.

1971 An Investigation of the Relationship Between Intelligence and Reading Achievement for Various Samples of Bilingual Spanish-Speaking Children. Ed.D. dissertation, New Mexico State University.

Problem: The purpose of this study was to investigate the relationship between intelligence scores [performance on the California Test of Mental Maturity (CTMM)] and reading achievement scores for various samples of bilingual Spanish-speaking children. This study evaluated the ability of the CTMM to predict reading achievement scores for different categories of bilingual third graders. The predictive validity of the CTMM was investigated in an effort to a) discover the combination of score yielding the maximum correlation with three reading achievement scores, and b) determine if the CTMM could descriminate between achieving and nonachieving readers.

Poole, H. E.

1968 The Effect of Urbanization upon Scientific Concept Attainment among Hausa children of Northern Nigeria. British Journal of Educational Psychology: 38:57-63.

Prince, J. R.

1969a Science Concepts in a Pacific Culture. Sydney: Angus & Robertson.

Read, M.

1959 Children of Their Fathers. London: Methuen.

Sankoff, Gillian

1971 Quantitative Analysis of Sharing and Variability in a Cognitive Model. Ethnology 10:389

In this article is discussed a general problem in the investigation of cognitive models in ethnology, that of analyzing the diversity of the cognitive models or maps of individual informants, referred to by Aberle (1960) as "cultural ideolects" and by Wallace as "mazeways" in relation to a unified socio-cultural system. The issues raised are: to what extent are cognitive maps shared, which aspects of them are not shared, how do these latter aspects vary from individual, and, in effect, how is intra-cultural diversity organized? The specific data discussed are part of a larger study of the kin group organization and land tenure of the Buang, a mountain people of northeastern New Guinea. This system is characterized by a high degree of variability both in informants' verbal reports of the affiliation of individuals and in their assignment of agricultural plots to kin groups (Buang dgwa). Verbal statements assigning individuals and plots to kin groups vary both among different informants and between reports made by the same informant on different occasions.

Sears, R. R.

1961 Transcultural Variables and Conceptual Equivalence. In Studying Personality Cross-Culturally. B. Kaplan, Ed. Evanston, Illinois and New York: Row, Peterson pp. 445-455.

Serpell, Robert

1971 Preference for Specific Orientation of Abstract Shapes among Zambian Children. Journal of Cross-Cultural Psychology 2:225. Experiment I replicates and extends among Grade 3 and Grade 5 urban Zambian schoolchildren findings obtained by Ghent (1961) among U.S.A. pre-school children. The *S*s showed consistent preferences for specific orientations of abstract, geometrical shapes, including some of the designs used in the Bender-Gestalt and Koh's Block tests. Three hypothetical determinants of these preferences are discussed: 1) "location of focal part," 2) "stability," and 3) "familiarity." Experiment II attempts to assess directly the relative importance of 1) and 3) as well as to examine age-trends among rural and urban Zambian schoolchildren and urban "Western-educated" expatriate children. In both experiments, only limited support was found for the "familiarity" hypothesis, It is concluded that intrinsic perceptual features of abstract shapes give rise, independently of cultural background, to consistent preferences for certain specific spatial orientations of those shapes. A tentative theoretical integration of this phenomenon is made with other results showing cross-cultural differences in the difficulty of copying orientation.

Tyler, S.

1969 Cognitive Anthropology. New York: Holt, Rinehart & Winston A collection of articles from the 50's and 60's.

Welsh, George S.

1969 Preferences for Basic Geometric Shapes by American and Egyptian Subjects. International Journal of Symbology 1:58-66.

The Welsh Figure Preference Test was used to determine whether there is consistent order of preference for five basic geometric shapes: circle, triangle, square, pentagon, and Greek cross. Results were obtained for fourteen groups of American Ss and sixteen groups of Egyptian students. It was found "that the Egyptian and the American orders of preference differ only for the cross and the circle which are either first or second for both culutral samples." The remaining shapes fall in the order triangle, pentagon, square and in this sense is an order of preference common to American and Egyptians. Some minor inconsistencies appear when individual group orders are examined. Cultural explanations of the results are held to be inadequate and it is suggested "that the symbology of geometric shapes may be approached through the psychology of individual personality." JA

APPENDIX B: SELECTED ADDITIONAL SOURCES AND ANNOTATIONS SOCIALIZATION

Barron, Frank and Harben Boutourline Young

1970 Personal Values and Political Affiliation Within Italy. Journal of Cross-Cultural Psychology 1:335.

The philosophy of life of 82 young Italian males was analyzed in relation to their preferences in politics. The political spectrum from Right to Left was identified by the following continum of party affiliation: Facist, Monarchist, Liberal Christian Democratic, Socialist, Communist, Popular Front Socialist. Statements in a questionnaire organized around personal and social philosophy were then correlated with positions of the young men on this continuum. The results showed clearly that the influence of the Catholic Church in matters of custom and morality is an important source of divisiveness in Italian political life. The Left splits sharply from Center and Right on matters having to do with divorce and sexual freedom, the Center is less exclusively determined by dogma but still is clearly orthodox and conservative, while the Right is dominated by its hatred of Communism and its emphasis on formalism and central authority.

Batt, Carl E.

1969 Mexican Character: An Adlerian Interpretation. Journal of Individual Psychology 25:183-201.

An "ideal type" is offered including a discussion of the socio-cultural situation, cult of manliness, woman's role, and childhood situation. JA

Berrien, F. Kenneth

1969 Familiarity, Mirror Imaging and Social Desirability in Stereotypes: Japanese Vs. Americans. International Journal of Psychology 4:207-215. 240 males and 240 females constituting Japanese and Hawaiian samples were compared with 225 males and 118 females from the United States on judgments of national groups based upon items from the EPPS. Even with social desirability partialed out, Japanese see Americans as more contrasting with themselves than appears for American Ss who compare themselves with Japanese. The Hawaiian sample falls in between the other samples. Data suggest that the strain-toward-consistency theories, derived largely from Western cultures, may not be applicable to Oriental respondents. "Further analyses of cognitive mechanisms in various cultures may lead to important revision in these theories and may also have a bearing on international bargaining styles." JA

Bhalla, Salma, and Castellano, Turner

1971 A Cross-Cultural Comparison of Interpersonal Schemas. Proceedings of the Annual Convention of the American Psychological Association 6:355-356. Investigated differences in interpersonal schemas (cognitive interpersonal plan) among individuals coming from 2 very different cultures (those of India and the United States). The focus was on 2 particular interpersonal schemas, the superior-subordinate relationship and the heterosexual relationship. After pointing out the major differences between the 2 cultures with regard to these relationship, it was hypothesized that Indians would show more distant interpersonal schemas than Americans on superior-subordinate and heterosexual placements. These hypotheses were supported, and the results were interpreted in terms of cultural variations leading to schemas. AA

Blane, Howard T., and Kazuo Yamammoto

1970 Sexual Role Identity Among Japanese and Japanese-American High School Students. Journal of Cross-Cultural Psychology 1:345. Sexual role identity was investigated by administering short forms of the Gough (CPI) femininity scale and the Franck Drawing Completion Test to 369 Japanese-American and Caucasian-American high school students in Hawaii and to 93 students in Japan. Across sex, Japanese were more feminine on both measures than either American group; within the American group, Japanese-Americans were more feminine than Caucasian-Americans on the Gough measure, but did not differ from them on the Franck. Sex-by-ethnicity results showed that males followed the ethnic pattern on both measures, whereas Japanese females were less feminine on the Gough than Japanese-American females and were equal to Caucasian-American females. Higher feminity of Japanese males may be understood as reflecting an Oriental factor of greater femininity related to definitional models of masculinity common to the East, in contrast to Western proof-of-masculinity models. Lower femininity of Japanese women may result from shifting conceptions of femininity in Japan and the East generally, while higher feminity among Japanese-American females may be a subcultural expression related to the history and origins of Japanese in Hawaii.

Blount, Ben G.

1971 Socialization and Pre-linguistic Development Among the Luo of Kenya. Southwestern Journal of Anthropology 27:41.

The pre-linguistic period of child development, the period during which the child's vocalization is devoid of linguistic meaning, is customarily divided into a cooing and babbling stage. Furthermore, the vocalizations are considered to be conditioned by biological and physiological, but not by social factors. A study of interaction between Luo adults and infants shows, however, that the interactional framework changes as the children progress in their phonative skills and that the alteration facilitates the linguistic and social development of the children. Luo adults key on the children's ability to interact vocally, reducing the complexity of linguistic input initially and then increasing it gradually as the children gain competence.

Bowden, Edgar

1973 Further Implications of Cultural Surgency and Sex-Dominance. American Anthropologist 75:176.

In the process of standardizing an Index of Sociocultural Development, it was found that male-dominant and equidominant societies differ significanly in their order of acquistion of developmental traits, their cultural elaboration and cultural surgency, the population of their largest settlements and possibly also its population density. These relationships are discussed in terms of the theoretical meaning of sex-dominace and cultural surgency and their dynamic significance for social change.

Brown, Judith

1971 The Cure and Feeding of Windigos: A Critique. American Anthropologist 73:20.

This paper suggests that, contrary to a view recently expressed, the usual treatment of windigo psychosis is not nutritional in nature. When ingestion is involved (which is rare) its sequel (vomiting to expel the windigo heart of ice) is given more curative importance, challenging the view that the northern Algonquins somehow "grasped" the idea of a nutritive cure for windigos. Nor is evidence at this point clear on nutritional cause of windigo.

Brown, Judith H.

1973 The Subsistence Activities of Women and the Socialization of Children. Ethos 1:413.

Task: To present a cross-cultural view of the relationship between the role of women in the subsistence activities of non-industrialized societies and socialization practices as it appears to apply to the research concerning maternal employment in our society.

Methods: Relevant literature, mostly Whiting's writings from the six culture study. The non-western cultures which are compared to this society are the Rajputs of Khalapur, Kwoman, !Kung bushmen, and the Nsaw. Findings: 1) The employment of mothers of young children is as much a vehicle for social change as it is the produce of such change. Employed mothers appear to rear children who are less egoistic and who do not fit the self-assertive, achieving mold. The question is no longer whether maternal employment is good or bad for children, but how the society can absorb the less egoistic progeny of employed mothers.

Alternative 2) Women's vocational choices could be broadened to the less "helpful" professions, their work could be seen as important to their self-realization and not merely as a way of helping the family. Were these changes to occur and were they communicated to children, employed mothers would present an egoistic model.

Burton, Roger V.

1973 Folk Theory and the Incest Taboo. Ethos 4:504.

Hypothesis: Incest taboo arose from a direct awareness by primordial humans of the deleterious effects of familial inbreeding.

Data: From the detrimental effects or consanguineous marriages support the possibility of this more parsimonious theory. Consideration was also given to the possibility that the same complex social custom could arise under different conditions and that it might be necessary to consider more than a single hypothesis to account for the total occurrence of such a custom. These alternative hypotheses seemed insufficient to account for the establishment of a taboo, but were seen as contributing to the conditions necessary for the dramatically visible deleterious effects of intrafamilial breeding to be expressed.

Carlsmith, Lyn

1973 Some Personality Characteristics of Boys Separated from Their Fathers During World War II. Ethos 1:466.

Purpose: A comparison between aptitudes, interests, and other personality characteristics of boys whose fathers were absent during world war II with boys whose fathers were not absent.

Sample: 40 (20 of each group) students in the Harvard class of 1964.

Method: Individual session lasting two hours, conducted by a single female experimenter: test in this order: Terman-Miles test, semantic differential, interview, strong vocational interest test. The directions for all tests simple and straight forward; a brief description of each test is presented, along with the results in the following sections.

Results: 1) Feminine cognitive styles whose fathers were absent. 2) More of the traits and interests typically associated with the female role in our culture than are boys who were not separated from their fathers. 3) Boys raised in stable middle class American families which apparently value intellectual and academic pursuits are able to find satisfying and socially approved modes of behavior that do not require an overtly masculine sex-role identity. The father absent boys in this sample appear to be generally content with their present role identity and manifest no symptoms of conflict or anxiety concerning it. It should be recalled that the father absent students have a weaker evaluation of adult men, project their own ideal self closer to women, and are more reticent to enter the adult professional world than are the father present students.

Chartier, George M., and Norman D. Suadberg

1969 Commonality of Word Listing, Predictability, and Chunking: An Analysis of American and Indian Ninth Graders. International Journal of Psychology 4:195-205.

Indian Ss of varied socioeconomic status from 3 communities in northern India manifested significantly greater variability in word-naming commonality than appeared among American Ss. This finding runs counter to the conception of American individuality as opposed to Indian group orientation. American Ss mentioned significantly more children than adults in a word-naming task, while the reverse held true for Indian S. This finding supports the interpretation of greater peer orientation among Americans than among Indians. Girls in American but not Indian groups gave more identical words than did boys. No relationships appeared between commonality, predicatability, and originality. Further study could cast light upon which aspects of language or environment or both produce the marked similarities between cultural groups. JA

Choungourian, A.

1970 Lebanese and American Aspects of Personality: A Cross-Cultural Comparison. Journal of Social Psychology 81:117-118.

Examined differences between the behavior tendencies of Lebanese and American student samples with respect to 6 aspects of personality: orality, anality, sexuality, aggression, independence, and achievement. The mean scale scores for self-descriptive statements on an always-never continuum indicated that on the whole the Americans show greater total orality and sexuality than the Lebanese, while the Lebanese exhibit more total aggression than Americans. Cross- and same-sex differences within and across the 2 cultures were also found. AA

Diaz-Guerrero, Rogelio

1971 The Teaching of Research in Psychology in Latin America: A Paradigm. Revista Latinoamericana de Psicologia 3:5-36.

The teaching to research in psychology in Latin America is not a simple technical problem. The lack of tradition of research, the absence of economic backing, the flooding of ready-made conceptions and operationally defined tools from the industrialized countries pose unique questions. A paradigm is described which has thus far proved successful in teaching research attitudes and practices in Mexican students. The model is a large cross-cultural research program in which students become aware of both techniques and the cultural differences that their local populations have vis-a-vis samples of another culture. Cross-cultural research is described as an excellent model, for it forces the realization of the large number of variable that intervene in human behavior. JA

Eckhardt, Kenneth W.

1971 Exchange Theory and Sexual Permissiveness. Behavior Science Notes 6:1.

An exchange theory of social behavior is advanced to explain intersocietal differences in sex codes. An examination of 153 societies drawn from Murdock's World Ethnographic Sample (1957) and from the

HRAF-Micro- files indicates modest support for the thesis that the location of power and resources as they influence social interaction and exchange are contributory forces in accounting for the level of sexual permissiveness found in society.

Elsarrag, M. E.

1968 Psychiatry in the Northern Sudan: A Study in Comparative Psychiatry. British Journal of Psychiatry 114:945-948.

Compared Northern Sudanese psychiatry to British psychiatry. Differences are emphasized, attributing these to differences in cultural patterns. The hypotheses given to account for the differences cited are in need of further research and verification. JA

Faris, James C.

1969 Sibling Terminology and Cross-Sex Behavior: Data from the Southeastern Nuba Mountains. American Anthropologist 71:482.

Contrary to certain of the assumptions of Nerlove and Romney (1967) on sibling terminology and cross-sex behavior, the sibling terminology of the Southeastern Nuba manifests a primary sex-of-speaker component and is shown to be conjunctive. Other data appear to weigh against their functional hypothesis for the cross-parallel distinction in sibling terminology but support a general conclusion that there may be different levels of explanation in kinship usage and that attention should be paid to cultural conceptions of cross-sex relations.

Garibay Patron, Miguel

1969 Psychology of the Mexicans. Revista Mexicana de Psicologia 3:350-354.

Psychologists doing research in Mexico should be aware of the 2 specific cultural aspects of Mexico which reflect personality differences peculiar to Mexico as compared with the typical cultural values in the United States. The 1st characteristic considered and discussed is "Machismo," defined as a type of inferiority complex. This shows up in bravado, alcoholism, and women-chasing behavior as characteristic of the typical Mexican male. The 2nd cultural characteristic is that of the self-denying Mexican women. A Mexican woman is expected to be completely submissive to a man or the men in her life.

Gordon, C. Paul, and Ronald Gallimore

1972 Teacher Ratings of Behavior Problems of Hawaiian-American Adolescents.

Journal of Cross-Cultural Psychology. 3:209.

Teachers in rural Hawaii completed the Behavior Problem Checklist for 196 Hawaiian and part-Hawaiian students. Two factors were extracted, reflecting disruptiveness and passive withdrawal. Similar studies in the United States have typically reported three factors; the two obtained in the Hawaii study, and an immaturity-inadequacy factor. Failure to find the latter factor was attributed to the cross-cultural nature of the situation. The results were interpreted to indicate that behavior problems reported by teachers vary little from situation to situation and culture to culture, due to the stimulus conditions inherent in the typical school situation.

Gorzhowska, Krystyna

1969 Changes in Children's Attitudes to Other Nationalities as Elected by Participation in the Malta Camp. Prleglad Psychologiczny 17:29-46. Investigated by questionnaire and projective techniques changes in attitude of 435 12-17 year old Polish children to children of other nationalities during an International scouting encampment. Both positive and negative changes were found in 50% of the Ss, with the number of negative changes being slightly higher. Results showed that a) prolonged, organized contact appeared to reduce prejudices, while short sporadic contact strengthened them; b) negative attitudes may be more easily changed when not accompanied by negative evaluations of the characteristics of a given nationality; c) direct contact exerted a greater influence on opinions than on emotional attitudes.

Granzberg, Gary

1973 Twin Infanticide - A Cross-Cultural Test of a Materialistic Explanation.

Ethos 1:405.

Hypothesis: Twin infanticide is found in societies that provide insufficient facilities for a mother to properly rear two children at once while at the same time fulfilling her other responsibilities.

Method: 1) Human Relations Area Files. (A slight overrepresentation of new world and African societies in the sample, and a maximum amount of linguistic and geographic separation has not always been attained).

The Independent Variable: 1) The amount of help available to mothers as inferred from a) settlement pattern size, b) family size, 2) The degree to which mothers are free from work as measured by a) the extent to which she is free from subsistence production duties, b) the extent to which she is free from time-consuming child care tasks such as breast feeding the child and carrying it around with her, even when it is asleep.

Summary Score: The score for each society was obtained by summing the scores on each variable.

The Dependent Variable: A reliability check by an independent judge on one-third of the sample showed 95% agreement with the author's ratings.

Results: Infanticide is caused by ecological factors. Contrary to the common practice of treating infanticide as one monolithic institution, this study supports work by Whiting (1964), which shows that infanticide is not a homogenous phenomenon consisting of different practices, each aimed at solving different problems in society.

Hare, A. Paul, and Dean Peaboyd

1971 Attitude Content and Agreement Set in Autonomy-Authoritarianism Items for United States, African, and Philippine University Students. Journal of Social Psychology 83:23-31.

Used cross-cultural data, including sets of autonomy and authoritarian items, to reexamine the importance of attitude content and agreement set in such items. Consistent results in this and other studies--the means, variability, reliability, and correlations for the 2 types of items—suggest that content and set are normally both important components of the scores. External correlates of such scales may relate to either content or set. The social background characteristics of these cross-cultural samples seem more related to content. JA

Hay, Thomas H.

1968 Ojibwa Emotional Restraint and the Socialization Process. Ph.D. dissertation, Michigan State University.

This study focuses on the motivation of the extreme restraint characteristic of the typical Ojibwa Indian and on the learning process through which motivation for this restraint is developed. Hypotheses derived from two different theories of the motivation of the restraint and from two different theories of the development of extreme restraint are tested in this study. One of the theories of the motivation of restraint traces this restraint to an exaggerated fear of retaliation for openly aggressive behavior. The other theory traces restraint to an exaggerated fear of doing serious injury to others by openly aggressive behavior. The data to test the hypotheses derived from these theories was gathered through observations of the interaction of adults and children in nine Ojibwa households at Lac du Flambeau, Wisconsin and four Ojibwa households at Berens River, Manitoba. These households cannot be taken to be representative of the populations at either place. The sample is definitely biased toward the more culturally conservative families. The number of observations recorded was sufficient to permit tests (with the Kolmogorov-Smirnov test of goodness of fit) for twenty-nine adults of the hypothesis derived from the motivational theories. The binomial test of goodness of fit was used to test the learning hypotheses for thirty-two children. The theory that Ojibwa restraint is motivated by fear of retaliation is not supported by the data. It implies that Ojibwa adults should punish offending children with high relative frequency. This hypothesis could be rejected at the .01 level for twenty-seven of twenty-nine adults. The theory that Ojibwa restraint is motivated by fear of doing serious injury to others is neither clearly supported nor contradicted by the data. There is, however, reason to believe that minor modifications of this theory would lead to deduction consistent with that data. The theory that fear of retaliation is learned through punishment in childhood is unsupported by the data--as might be expected from the results for the theory that restraint is motivated by fear of retaliation. Finally, the theory that exaggerated fear of injuring others is due to parental acquiescence in the offensive behavior of children can be rejected for only two of thirty-two children.

Hay, Thomas J.

1971 The Windigo Psychosis. Psychodynamic Cultural and Social Factors in Aberrant Behavior. American Anthropologist 73:1.

Although windigo cannibalism is unique to the northern Algonquins, the psychodynamic factors which produce it are general. The differential occurrence of the disorder is explained in terms of the northern Algonquin emphasis on following inner promptings, the absence of cultural alternatives, and in terms of the nature of interaction in the particular bands for which cannibalism was reported.

Hsu, Francis L. K.

1971 Psychological Homeostasis and Jen: Conceptual Tools for Advancing Psychological Anthropology. American Anthropologist 73:1.

Personality is a Western concept rooted in individualism. The basic importance accorded it in psychological anthropology has obscured our understanding of how Western man lives in Western society and culture, or how any man lives in any society and culture. What is missing is the central ingredient in the human mode of existence: man's relationship with his fellow man. The concepts of psycho-social homeostasis and _jen_ are designed to extricate our subdiscipline from this intellectual prison. The first describes the process whereby every human individual tends to seek certain kinds of affective involvement with some of his fellow humans. The second refers to the internal and external limits of the individual's affective involvement. With the aid of five major hypotheses based on these concepts, a review is made in a new light of familiar facts drawn from China, the United States and Japan.

Jackson, Gary B., and A. Kimball Romney

1973 Historical Inference from Cross-Cultural Data: The Case of Dowry. Ethos 1:517.

Purpose: To show that dowry is a relatively recent cultural pattern and second, to show that the existence of dowry is dependent on a complex level of cultural development.

Data: From Murdock's world ethnographic sample of 565 cultures.

Arguments: 1) the geographical distribution of dowry is restricted in area indicating recent development. 2) dowry is dependent upon a high level of cultural complexity; that is, cultural complexity is a necessary though not sufficient condition for the appearance of the practice of dowry.

Findings: Through statistics, 1) dowry is found in only two of the six major geographical regions. Seventy-five percent of all cases are located within the circum-Mediterranean area. 2) 21 out of 24 societies fit the assumption that cultural evolution moves from simple forms to more complex structures involving higher levels of political integration and technology. 3) we use bride price as a control case. If it is a more ancient trait than dowry, then we would expect to see it more evenly distributed. 4) No correlations with high levels of political integration.

Johnstone, John W. C.

1970 Age-Grade Consciousness. Sociology of Education 43:56.

Studies of generational phenomena have not paid sufficient attention to the distinction between cohort and kinship aspects of generations.

Using empirical measures of class consciousness as a model, consciousness of kind based on age is measured and related to theoretically relevant determinants and consequences. Age-grade consciousness is found among a sample of architecture students to be positively linked with familial value conflict and negatively linked with commitment to becoming a professional architect. A path model is presented to interpret the relationships.

Kiefer, Christie, W.

1970 The Psychological Interdependence of Family, School and Bureaucracy in Japan. American Anthropologist 72:66.

The Japanese "examination hell" phenomenon is viewed as a series of crisis rites through which the child passes from family-centered to peer group-centered values in a "particularistic" society. It is held that this model has greater explanatory power than the "minimization of competition" model proposed by others and that it also helps to explain the phenomenon of student radicalism and centrifugal relationships in middle-class communities.

Kilbridge, Janet E., Michael C. Robbins, and Philip L. Kilbridge

1970 The Comparative Motor Development of Baganda, American White, and American Black Infants. American Anthropologist 72:1422.

Baganda infants in Uganda were found to be significantly advanced in motor development during the first year of life when compared with Bayley's sample of American white and black infants. Though they were not found to be as precocious as Geber's sample of Uganda infants, the same downward trend in degree of motor development during the second year of life was found. As age increased, developmental motor quotient (DMQ) decreased, but at 24 months of age the Baganda infants still obtained an average DMQ higher than either American sample. Several interpretations of these results are considered.

Krauss, Herbert H.

1970 Social Development and Suicide. Journal of Cross-Cultural Psychology 1:159-167.

Studied 58 societies to test the relationship between societal complexity and frequency of suicide. Suicide frequency was highest in the medium complexity cultures and lowest in the low complexity cultures. The highly complex cultures were divided between high and low suicide rates. "It is suggested that this result may eventually be understood in terms of the way in which societies bind their members into patterned social relations." JA

Legesse, Asmarom

1973 The Controlled Cross-Cultural Test. Ethos 1:521.

Purpose: To examine the usefulness of the matching technique in assembling cross-cultural samples. The essential feature of the procedure proposed here is that the sample of cases consists of two segments: an experimental samples and a control sample.

Hypothesis: The same problem might be resolved by allowing early marriage, but, at the same time, any children born to the "immature" parents must either be abandoned to die or they must be given up for adoption by members of the appropriate generation.

Sample: The samples of societies used in the early history of cross-cultural research consisted of cultures ranging from haunting and gathering bands to complex nation areas. This in part was necessitated by the limited size of the human relations area files. To assemble a statistically viable sample it was necessary to use a very heterogeneous group of societies. The procedure was criticized by the more particularistic brand of ethnographers who preferred to carry out comparative analyses on a spatially, typologically, or typically limited scale.

Lem, S.

1969a A Model of Culture. Voprosy Filosofii 23:49-62.

Culture is viewed in terms of a "system of games." Within this context, the problems of "cultural codes" and "culture as a meta-game" are considered, and a "model of culture" is proposed. JA

Lester, David

1970 Adolescent Suicide and Premarital Sexual Behavior. Journal of Social Psychology 82:131-132.

C. Kluckhohn's suggestion that adolescent suicide would occur more in societies where premarital sexual expression was severely punished was tested on a sample of 40 monliterate societies. The hypothesis was not confirmed. AA

Lester, David

1971 Suicide and Homicide Rates and the Society's Need for Affiliation. Journal of Cross-Cultural Psychology 2:405.

Rudin (1968) correlated two clusters: murder, suicide and alcoholism formed one and ulcers and hypertension formed the second. Rudin felt that these two groups of causes of death reflected the operation of aggressiveness in the societies: deaths due to aggressiveness or acting-out and deaths due to inhibition of aggression. Thus, Rudin predicted that the societal need to achieve (as assessed from children's tales in the society) would correlate with deaths from inhibition of aggression whereas the societal need for power would correlate with deaths from aggressiveness. The data from a sample of developed nations only partially supporting his hypotheses, and Lester (1968) obtained identical results from a study of primitive societies and national motives assessed from folk tales. Need achievement (n Ach) was unrelated both to the suicide and the homicide rate while n Pow was significantly related only to the suicide rate.

Levin, Joseph, and Eliezer S. Karni

1971 A Comparative Study of the CPI Femininity Scale: Validation in Israel. Journal of Cross-Cultural Psychology 2:387.

The 38-item Femininity Scale of the California Psychological Inventory has validly differentiated between males and females in seven countries, and the extension of these findings to other countries would help yield an instrument for further cross-cultural studies. A Hebrew translation of the scale was administered to a random sample of the Israeli population, consisting of 200 males and 200 females. The means were 16.36 and 22.02 respectively and the difference of 5.66 is highly significant (p. .001). All the items, except one, differentiated in the proper direction, though several items showed low discriminating power. The validity of Fe in Israel is one of the highest among the countries for which studies are available, and is next to the results obtained in the U.S.A.

LeVine, Robert A

1973 Patterns of Personality in Africa. Ethos 2:123.

This article is an attempt by a psychological anthropologist to extract from his experience of Africans preliminary answers to general questions that specialists rarely consider but "cannot afford to ignore": Are the distinctively African patterns of personality existing now? What differences are there in behavior and personality between Africans and Westerners? How do personality characteristics of Africans affect their social adaptation to changing conditions?

Levy, Robert

1973 The Tahitians. Chicago: University of Chicago Press.

McKissack, Ian J.

1971 Conformity in Ghana. British Journal of Social and Clinical Psychology 10:87.

Discusses studies of African cultural patterns in which certain behavior measures of social processes should show cross-cultural variations. The testing of 26 Chanaian college students is described and compared to other studies which consider the influence of social pressure on African Ss that is exerted in face-to-face interaction situations.

Margetts, Edward L.

1968 African Ethnopsychiatry in the Field. Canadian Psychiatric Association Journal 13:521-538.

Discusses the need for a more intensified approach to psychiatry in Africa, emphasizing the interdependence of anthropology, psychology, and psychiatry in primitive African cultures. 2 kinds of field ethnopsychiatry which could be applied in Africa are described: clinically and research oriented. The phenomena which should be investigated by a psychiatrist working in the African field include: the normal and the abnormal person (both according to local African standards); conceptions of magic; practitioners of magic or ritual experts; social hierarchy; religion; birth and child rearing; genital customs; education; death and burial customs; dreams and other symbolism; demonology; secret societies; politics; suicide, murder, and cannibalism; justice; alcohol and drugs; sex habits; stories and myths; dances and music; art; and artifacts. JA

Meadow, Arnold, and Louise Bronson

1969 Religious Affiliation and Psychopathology in a Mexican American Population. Journal of Abnormal Psychology 74:117-180.

Studies 54 Protestant and 54 Catholic Mexican-American Ss of similar levels of acculturation, education, and socioeconomic background. Evaluations of psychopathology were derived from the L-R sections of the Cornell Medical Index and behavioral observations. The lower rate of pathological responses by Protestant Ss was attributed to the social support offered by the small, intimate congregations with their strong, paternal leadership and the Protestant doctrines of asceticism and individual responsibility which contribute to impulse control. JA

Mehta, Perin H., Pritim K. Rohila, Norman D. Sundberg, and Leona E. Tyler

1972 Future Time Perspectives of Adolescents in India and the United States. Journal of Cross-Cultural Psychology 3:293.

A review of event-listing research suggests that longer time perspective is associated with more favorable characteristics including higher socio-economic level. The major samples consisted of approximately 100 boys and 80 girls each in ninth grades in small towns in India and America. They did not show significant differences on median time attributed to seven expected life events, though Indian boys showed greater diversity. In smaller samples in large cities, high socio-economic groups had longer time spans, but again nationality and sex differences did not appear. Content analysis showed a greater American emphasis on leisure and one's own courtship, marriage, and children, while a greater Indian emphasis was placed on other's courtship, marriage, and children, other's deaths and health.

Merelman, Richard M.

1972 The Adolescence of Political Socialization. Sociology of Education 45:35.

This article assesses political socialization research in terms of its theoretical adequacy, descriptive findings, and methodology.

Research in political socialization has uncovered much about the substance of childhood and adolescent political orientations and also has managed to link some agencies of socialization reliability to particular political attitudes. Major deficiencies include the lack of attention to socialization as a process, the divorce from useful psychological and social theory, and the reliance on restrictive and inadequate methodologies. However, if care is taken research in political socialization can aid educators in the design of curricula and teaching practices.

Meyer, A.

1968 Superstition and Magic in the Caribbean: Some Psychiatric Consequences: Preliminary Investigation. Psychiatric, Neurologia, Neurochirurgia 71:421-434.

Present examples of magical and superstitional beliefs in the Caribbean area. The similarity of these beliefs in these culturally, linguistically and socioeconomically often so different territories is striking. Magic and superstition influence, in a far higher degree than is mostly assumed, not only inter-human relations but the thought-content and behavior pattern of the individual as well. They form a psychic disposition that could be described as compulsive paranoic. An attempt is made to propose a theory which could explain the extremely high incidence of paranoid reactions among psychotics as a result of these superstitional beliefs; however, it is concluded that further exploration in this field and especially of its impact on mental health, is prerequisite. JA

Miller, Stephen

1973 Ends, Means, and Galumphing: Some Leitmotifs of Play. American Anthropologist 75:87.

Two main questions are asked here about play. 1) Is it really a coherent category of activity in spite of the diversity of forms it takes in man and animals? 2) Does it make sense in terms of the evolution of behavior that play should have become so ubiquitous among our activities? These questions are approached by looking at play as a way of orchestrating the ends and means of action in which the means are the center of interest, in which the economics of survival are subordinated to combinatorial flexibility.

Modan, B., I. Nissenkorn, and S. R. Lewkowski

1970 Suicide in a Heterogeneous Society. British Journal of Psychiatry 116:65-68.

Jewish suicides have shown an annual rate of 11.8/100,000 population, with incidence rising in males to age 35 vs. a steady age rise with females. European-born show the highest rates, and methods are, as usual, sex-specific. A striking phenomenon is the high incidence of death by burning in females of African-Asian or Arab origin. Suicide peaks on Sunday which is the equivalent of the Western Monday. JA

Munroe, Robert L., and Ruth H. Munroe

1972 Obedience among Children in an East African Society. Journal of Cross-Cultural Psychology 3:395.

Among the world's culture areas, African societies are rated the highest in socialization for compliance. The Kikuyu, a group with typically high compliance training, were tested experimentally for obedience. Eighteen children between five and nine year of age were given two tasks by their own mothers and the same two tasks by another child's mother. Overall obedience was very high, with ten children obeying fully on all tasks. The strongest contrast with previous findings was that, unlike American children, Kikuyu children did not disobey their own mothers more than another child's mother. The strong compliance emphasis was tentatively argued to be a concomitant of the child's participation in the household's economic activities.

Murray, John B.

1968 Learning in Homosexuality. Psychological Reports 23:659-662.

Distinguishing between sex in the biological sense and sex-role or sex-identity as a reflection of culture allows for research of psychology and psychiatrists on the subtle influences of learning in homosexuality. JA

Naroll, Raoull

1970 What Have We Learned from Cross-Cultural Surveys: American Anthropologist 72:6.

This is a review of cross-cultural surveys. The tasks and problems of such surveys are reviewed and a system of evaluating their validity is presented. Surveys of kinship have shown their validity of a developmental pattern in residence rules, descent rules and kin terms; much has been learned about kin avoidance and much suggested about inheritance, marriage and divorce patterns. Surveys of cultural evolution have established the validity of seven major elements of cultural evolution and firmly linked these to archeological findings; evolutionary links to several aspects of life style have also been shown or suggested. Many surveys have shown relationships between child training and adult behavior and between social settings and antisocial behavior, but the nature of the linkages remains largely unsettled. Unresolved too are most conflicts between rival modes of explanation of functional conundrums, such as puberty rites and unilateral cross-cousin marriage. Factor analysis of large trait matrices have shown the importance of at least five major factors.

Newton, Niles

1970 The Effect of Psychological Environment on Childbirth: Combined Cross-Cultural and Experimental Approach. Journal of Cross-Cultural Psychology 1:85.

A cross-cultural survey of birth patterning revealed marked differences in the speed of labor and indicated extreme variations in the psychological environment during labor and delivery. Speedier, easier labors appear to be related to acceptance of birth as a normal physiologic phenomena uncomplicated by sexual shame or fear-inducing rituals. The hypotheses development from cross-cultural surveys were then tests experimentally in mice. Disturbance applied during labor resulted in reduction of labor speed immediately after the disturbance. Mice continuously disturbed at term delivered first pups significantly later, and had a 54% higher pup mortality rate. When expectant mice were rotated between familiar environment with shelter and glass fish bowl imbued with cat odor, spending equal amounts of time in each, significantly fewer births took place in the later.

Pelicier, Yves

1968 The Psychology of People and Psychiatry. Revue de Psychologie des Peuples 23:288-302.

Proposes that there are ethnocultural stereotypes in the expression of various psychiatric disease entities. Suicide is less frequent in Africa, whereas hypochondria is prevalent. In Japan, Indonesia, North Africa, Alaska, and Siberia, there appears to be a prevalence of echolalia, echopraxia, and obsessive-compulsive neurosis. Additional examples of frequent manifestations of particular symptoms in certain cultures are provided. JA

Peterson, Donald R., and Guiseppe Migliorino

1967 The Uses and Limitations of Factor Analysis in Cross-Cultural Research on Socialization. International Journal of Psychology 2: 215-220.

Available evidence shows that highly complex multifactorial systems for describing parent and child behavior from culture do not meet the test of statistical invariance and structural stability which must

be satisfied by any adequately general descriptive framework. Limiting the system to small sets of high variance factors yields acceptable stability and conceptual clarity. Effective intercultural comparisons require specific behavioral analysis in addition to factorial study.

Phillips, Beeman N., Roy P. Martin, and Leon Zorman

1971 Factorial Structure of the Children's School Questionnaire in American and Slovenian Samples. Journal of Cross-Cultural Psychology 2:65.

In the present study, the factorial structure of the Children's School Questionnaire, and differences on common factors, were investigated in samples of American and Slovenian children. The majority of the evidence indicates that the test measures the same major attributes in both samples, with one factor, labeled school anxiety, over-shadowing all the others. In addition, on the five common factors--school anxiety, sex role (2), school aspirations, and feelings of inadequacy in school--nationality, social status, and sex differences were found. Sex differences were generally larger among Slovenian Ss, while social status differences were generally larger among American Ss. Socio-cultural differences between the two nationalities were discussed and these differences were used to account for the major findings, although the "explanations" were more or less hypothetical.

Pretwich, Sheldon G.

1969 The Influence of Two Counseling Methods on the Physical and Verbal Aggression of Pre-School Indian Children. Ph.D. dissertation, Arizona State University.

The purpose of this study was to: a) investigate the influence of anthropomorphic models as a therapeutic vehicle to facilitate five year old Indian children in learning to express and appropriately deal with aggressive impulses, and b) investigate the influence of group counseling with Indian mothers as it affects five year old Indian children's aggression.

Raina, T. N., and M. K. Raina

1971 Perception of Teacher-Educators in India about the Ideal Pupil. Journal of Educational Research 64:303-306.

Attempted to a) determine what concepts teacher-educators in India have of the ideal student in terms of characteristics they believe should be encouraged and discouraged, and b) compare the results with concepts of teachers in the United States. Torrance's Ideal Pupil Checklist was administered to 100 teachers of education in teacher training colleges in Rajasthan. When the 62 characteristics of the Checklist were ranked, a rank-order coefficient of correlation of .76 was obtained between the ranks assigned by the Rajasthan teacher-educators and United States teachers. In general, the Rajasthan *Ss* emphasize the receptive nature of man and deemphasize man's self-acting nature more than United States teachers. JA

Roberts, J. M. and M. L. Forman

1971 Riddles: Expressive Models of Interrogation. Ethnology 10:509.

This article attempts to present a comprehensive theory of riddles and riddling to account for uneven distribution of riddles in time

and space in both cultural-historical and functional terms, for the structure and meaning of riddling patterns, the involvements of these patterns by individuals. Use of Tagalog model for study.

Rohner, Ronald P., Billie R. DeWalt, and Robert C. Ness

1973 Ethnographer Bias in Cross-Cultural Research: An Empirical Study. Behavior Science Notes 8:275.

We direct attention in this paper to the problem of ethnographer bias (i.e., systematic errors occurring in the ethnographic reporting process) in cross-cultural research, and therefore in ethnographic fieldwork itself. Using multiple regression and other multivariate statistics, we assess the influence of ethnographer bias on the correlation between traits in the cross-cultural survey component of Rohner's Rejection-Acceptance Project (RAP). These procedures suggest a systematic ethnographer error, "the bias of romanticism," in anthropological research. Overall, however, the relationships among substantive variables in this research cannot be explained by this bias or by other forms of systematic error plaguing cross-cultural research. Thus, in the absence of a successful competing theory, we conclude that all but one of the universal causal-functional relationships postulated in Rohner's theory are validated. AA

Rohner, Ronald R., and Leonard Katz

1970 Testing for Validity and Reliability in Cross-Cultural Research. American Anthropologist 72:1068.

A set of procedures is offered for assessing interrater reliability and certain aspects of validity of codes in cross-cultural studies. The method assumes that at least two independent raters have coded more than one trait coded by a second, and all the codings by a single rater are intercorrelated with each other. The results are presented in a multitrait-multirater matrix. From this matrix it is possible to determine the interrater reliability and discriminant validity of traits in addition to a higher order concept based on pairs of traits.

Rohrl, Vivian J.

1971 A Nutritional Factor in Windigo Psychosis. American Anthropologist 73:97.

This paper reviews reports of windigo psychosis, in particular those cases that are "cured" before they are "full-blown," with a view to studying evidence of an organic factor related to the development of illness. Knowledge of biological factors related to ritual behavior in different cultures is reviewed in this context, together with examples of windigo cases and relevant information about nutrition. It is indicated that the traditional "cure" of windigo symptoms, which frequently induces the ingestion of fatty meat, particularly bear meat, indicates a positively reinforced-due to beneficial effect-curing method for this condition. Thus, such an investigation of a widespread way of curing windigo psychosis supplements our analysis of culture with an additional-extracultural-dimension.

Rossi, Ino

1973 The Unconscious in the Anthropology of Claude Levi-Strauss. American Anthropologist 75:20.

Levi-Strauss claims that the unconscious activity of the mind is more important than the conscious one for understanding social phenomena and that the unconscious consists of an aggregate pf forms which are imposed on psychological and physical content. The real inspiration of Levi-Strauss' notion is the Kantian notion of mental constraints and the postulate of isomorphism of mental and physical laws. The methodological usefulness of the unconscious as a principle of intelligibility is placed in evidence. AA

Samuel, T. J.

1966 The Strengthening of the Motivation for Family Limitation in India. Journal of Family Welfare 13:1-16.

The main factors for low "motivation" for family limitation in India are tradition, religion, and fatalism. Education, economic incentives, and disincentives may be helpful. Some of these are suggested. JA

Schlegel, Alice

1973 The Adolescent Socialization of the Hopi Girl. Ethnology 12:449.

This socio-cultural study seeks to prove that a crisis of adolescence of the Hopi girl, which might be brought about by existing restrictions placed upon her by her mother and the need to find a husband, does not occur to the same extent as in Western culture, nor does the stage of adolescence lack moodiness, intergenerational conflict, or anxiety over sex and love as in Margaret Mead's Samoan studies. The explanation from this is that there are no conflicting standards or alternative choices leading to dilemmas, and the "crisis" of the Hopi girl is comprehensible within the context of the socialization process.

Shweder, Richard A

1973 The Between and Within of Cross-Cultural Research. Ethos 1:531.

Purpose: An analysis of data that indicate a discrepancy between across unit and within unit findings and discusses the possibility that valid cross-cultural variables are intraculturally inappropriate.

Method and Data: The structure of Rorschach test response categories and social behavior in small groups.

Conclusion: By suggesting that under certain conditions cross-cultural and intra-cultural research are not mutually relevant. There are two modes of comparative cultural research: 1) cross-cultural population sample is selected and correlations across this sample of cultures are used to test hypotheses and discover universal dimensions of variations. 2) A comparative intra-cultural replication is performed and the correlations within each of a number of cultures are used to test hypotheses and discover universal dimensions or variation. Reasons other than "problems of measurement" all known cultures may not differ in the same ways. Valid indicators of a theoretical variable may be discovered within any of them, or may be discovered within each of all cultures without being discoverable across them.

Skaa, Susan, Juris G. Draguns, and Leslie Phillips

1969 Ethnic Characteristics of Psychiatric Symptomology within and across Regional Groupings: A Study of an Israeli Child Guidance Clinic Population. Israel Annals of Psychiatry and Related Disciplines 7:31-42.

Compared discrete manifestations and inclusive categories of symptomatology between socioeconomically and educationally matched groups of boys of Iraqi, Yeminite, German, and Polish parentage in a child guidance clinic. Attempts were also made to compare smaller, unmatched groups of girls. Results reveal differences in psychopathological expression among all the groups. Middle Eastern boys tended toward overtly expressed maladaptive and aggressive behavior, while ideational and self-directed symptomatology predominated among the European boys. Within each of the 2 regions, boys of Iraqi parentage differed from Yeminites in more direct and explicit expression of aggression and boys of Polish extraction exceeded those of German background in avoidance of, and withdrawal from, social contact. Results obtained with girls were not parallel to those observed in boys and need fuller investigation. JA

Sommerlad, Elizabeth A., and W. P. Bellingham

1972 Cooperation-Competition: A Comparison of Australian European and Aboriginal School Children. Journal of Cross-Cultural Psychology 3:149.

Australian European and full-blood Aboriginal school children were assigned to groups of four individuals who performed a task in which cooperation maximized and competition minimized reward. The Aboriginal sample showed significantly more cooperative responses than the European sample, with individuals in the stream preparing for secondary education showing more competitive behavior than those continuing post-primary courses emphasizing manual training and domestic science. The role of kinship as a determinant of cooperation was investigated, but Aborigines from the same tribe with reciprocal kinship obligations failed to be more cooperative than those Aborigines from different tribes.

Tanaka, Yasumasa

1972 Values in the Subjective Culture: A Social Psychological View. Journal of Cross-Cultural Psychology 3:57.

Using POLDI (a variation of the semantic differential method) as a measuring instrument, evidence was shown that there is the subtle but real cultural uniqueness of evaluative criteria despite the overall consistency in the semantic frame of reference when Japanese and German Ss judged a set of nation concepts. Next, Evaluative Atlases of several critical concepts were constructed on the basis of data collected in 15 language/culture communities by means of multilingual semantic differentials, and comparisons were made among the 15 communities. Finally, a plan of intercultural cooperation was proposed, in that the responsibility of social and behavioral scientists is stressed for both making up and executing plans for the engineering of such intercultural cooperation.

Watson, Lawrence C.

1972 Sexual Socialization in Guajiro Society. Ethnology 11:150.

In Guajiro society there is an apparent relationship between severe socialization of female sexual behavior and the demands made on a woman's behavior by the institution of marriage, the success of which has a bearing on the ability of her family to maintain its status in society and to contract useful political alliances. Severe socialization is functionally adapted to these demands because it produces negative fixation in the sexual system, which in turn acts as a psychic monitoring device to discourage the unmarried girl from experimenting sexually and thereby increases the likelihood that she will remain sexually chaste, marry well, and be potentially valuable to her lineage for cementing a political alliance.

Weigert, Andrew J., and Darwin L. Thomas

1970 Socialization and Religiosity: A Cross-National Analysis of Catholic Adolescents. Sociometry 33:305-326.

Relates dimensions of religiosity (belief, experience, knowledge, and practice) to adolescents' perception of the control and support received from parents. A total of 740 Ss were chosen from 4 urban male Catholic schools in the United States, Puerto Rico, and Mexico. Except for the Mexican sample and the knowledge dimension, the apriori hypothesis that adolescents perceiving a high (low) degree of control and support score highest (lowest) on religiosity is moderately verified, mainly because of a positive relationship between support and religiosity, although control is noticeably related in the Puerto Rican sample. For the Anglo samples, the usefulness of socialization variables in understanding religiosity is demonstrated, and the differences across samples point to the importance of reasons for religious behavior. JA

Whittaker, James O., and S. J. Whittaker

1972 A Cross-Cultural Study of Geocentrism. Journal of Cross-Cultural Psychology 3:417.

College students in the United States, Argentina, Fiji, India, and New Zealand were asked to draw a map of the world in 10 minutes, putting in as much detail as possible. Maps were examined for number of countries, and other details. Geocentrism seems to be reflected in the fact that one's own country is almost always disproportionately large, and it also seems to be reflected in the fact that neighboring countries virtually always tend to be drawn on the map.

Wittmer, Joe

1970 Homogeneity of Personality Characteristics: A Comparison between Old Order Amish and Non-Amish. American Anthropologist 72:1063.

The purpose of this study was to compare the variability of measured personality characteristics of 25 Amish and 25 non-Amish male youth, between the ages of 18 and 21, from the same community. This study assumed that the homogeneous nature of the Amish culture would predetermine greated similarity of personality among the Amish youth. The findings indicate that the aspect of personality similarity was significantly greater for the Amish group on 9 of 16 measures of personality. The findings were discussed in light of the Amish culture.

APPENDIX C: SELECTED ADDITIONAL SOURCES AND ANNOTATIONS IN SOCIAL CHANGE

Anant, Santokh S.

1970 Self- and Mutual Perception of Salient Personality Traits of Different Caste Groups. Journal of Cross-Cultural Psychology 1:41. As part of a project to study the changing inter-caste attitudes in India, 239 urban subjects, belonging to 4 traditional Hindu castes and Harijan castes (former "Untouchables"), checked five traits (from a list of 88) most characteristic of their own and other groups. A comparison of results with similar studies conducted earlier points to the fading of earlier stereotypes about castes. The picture of one's own caste was often similar to the perception of that caste by other castes, indicating a general acceptability of some of the caste-stereotypes. The higher castes still show resistance to relinquish age-old prejudices against the lower castes.

Averill, James R., Edward M. Option, Jr., and Richard Lazarus

1969 Cross-Cultural Studies of Psychophysiological Responses During Stress and Emotion. International Journal of Psychology 4:82-102. Within a theoretical framework that considers emotions in terms of stimulus properties, appraisers and related sub-systems and response categories, experimental data on emotion can be fruitfully studied. Data gathered from Japanese and American Ss who watched a sub-incision film yielded similar results, with the exception of differences in skin conductance, and the tendency of Japanese Ss to respond physiologically at the same level throughout, in contrast to their American counterparts. Current investigations proceed along lines of exploring expressive reactions and interpersonal relations in stress and emotions. Similarities discovered between cultures deserve emphasis, "for ultimately it is only in terms of pancultural psychological processes that differences can be interpreted."

Bergeron, Arthur P., and Mark P. Zanna

1973 Group Membership and Belief Similarity as Determinants of Interpersonal Attraction in Peru. Journal of Cross-Cultural Psychology 4:397. College students in two universities in Arequipa, Peru rated target persons differing in terms of group membership and belief similarity on a series of scales designed to measure various aspects of interpersonal attraction. The results indicated that, whereas belief similarity was a reliable determinant of interpersonal attraction, group membership accounted for significantly more variance, even when interpersonal atrraction was assessed on dimensions which imply low levels of intimacy. These results were contrasted with those obtained in the United States in connection with the so-called race versus belief controversy. The differences between the two sets of results were attributed to the strong group norms in economically less advanced countries.

Bonilla, Eduardo Seda

1969 Spritualism, Psychoanalysis and Psychodrama. American Anthropologist 71:492.

The term "fluids" of spiritualism seems related to the libido concept in psychoanalysis. A mental breakdown explained as possession by spirits with whom the patient has been in contact in another existence

(existential situation) seems to have affinity with a phenomena similar to what psychoanalysts call a "flooding of the ego by a return of the repressed." When compared with psychotherapeutic practice, spiritualism reveals clear affinities with psychodrama.

Borra, Ranjun

1970 Communication Through Television UNESCO Adult Education Experiments in France, Japan and India.

The UNESCO studies demonstrated the potential of TV for promoting culture and education among the general masses. They also indicated that teleclubs (group viewing) could be an effective means for communicating messages of social education, and that the appeal of TV was not restricted within national boundaries. JA

Carment, David W., and G. Richard Tucker

1970 Correlates of Birth Control Practices in India. Journal of Cross-Cultural Psychology 4:111.

Scores on Rotter's I-E scale, attitudes regarding contraception, and other personal and familial data were obtained from vasectomized and nonvasectomized factory workers in urban North India. It was found that those in favor of contraception were more internal than those against. I-E scores did not differentiate between the vasectomized and nonvasectomized, but the vasectomized, as compared to the nonvasectomized, had more living children and more male than female children. There was some suggestion as well that those who had alone made the decision to be vasectomized were more likely to perceive the outcome as negative than were those who had made a joint decision with their wives. Finally, it was noted that a greater proportion of Sikhs than Hindus supported contraception.

Caudill, William

1973 The Influence of Social Structure and Culture on Human Behavior in Modern Japan. Ethos 3:343.

This article presents some ideas on the effects of social and cultural change on psychological adjustment in Japan. It is based on a review of literature written in the last 100 years on Japanese national character, with special emphasis on the psychological and behavioral characteristics that seem to have persisted from the past and remain viable in modern Japanese life.

Christozov, Christo

1970 Schizophrenia in North Africa Examined from the Viewpoint of Transcultural Psychiatry. Annales Medico-Psychologiques 1:521-554.

Studies 260 male Ss hospitalized in Morocco on individual, familial, and collective levels with respect to age, family status, number of offspring, occupation, residence characteristics, duration and number of hospitalizations, neurologic condition, and incidence of alcoholism, cannibalism, and syphilis to examine how ethnic, cultural, and religious peculiarities of North African society mark the clinical picture and dynamism of schizophrenia. Paranoia, followed in importance by catatonia, is the predominant form, doubtlessly representing a fundamental characteristic of North African psychopathology. Other clinical characteristics, as well as prognosis, are discussed in relation to their counterparts in European countries. JA

Cohen, Erick

1968 "Social Images" in an Israeli Development Town. Human Relations 21:163-176.

Studied social images in an Israeli town to determine whether the dichotomy of higher class harmonious images and lower class conflicting images is valid. At least 1 further variable, the equalitarian image, should be added since not everyone perceives society hierarchically. A fourfold typology is proposed, based on a dual dichotomy: harmonious vs. conflicting and ascriptive vs. nonascriptive images. JA

Chawla, Tilak R.

1970 Cultural Factors and Kahn Intelligence Test. Indian Psychological Review 6:77-79.

Examined the culture-free characteristics of the Kahn Intelligence Tests (KIT). The KIT was administered to 154 public school children in India--82 boys and 72 girls. Analysis of data using analysis of variance showed that groups of Ss coming from different subcultures, i.e., rural vs. urban, socioeconomic levels, language groups, and sex, did not differ significantly in their IQ scores. The findings suggest that scores on the KIT are not influenced by cultural ecology. JA

Deshen, Shlomo

Ethnicity and Citizenship in the Ritual of an Israeli Synagogue. Southwestern Journal of Anthropology 28.

Tension between citizenship and ethnicity is expressed in an Israeli ethnic synagogue by changes in ritual and symbolism. The symbolic

expression of these changes related worshippers of the synagogue, who are recent immigrants to Israel, to their new heterogeneous environment. Analysis of the changes in symbols demonstrates that the referential aspects have expanded, consistent with alterations in traditional relationships. The reinterpreted symbols may be categorized in terms of a typology of religious change as instances of "tradition," in the sense that the experiential range to which the symbol applies has been changed.

Dawson, John L. M., Henry Law, Andrew Leung, Richard E. Whitney

1971 Scaling Chinese Traditional-Modern Attitudes and the GSR Measurement of "Important" Versus "Un-Important" Chinese Concepts. Journal of Cross-Cultural Psychology 2:1.

Dawson, John L. M., William Ng, and Wing Cheung

1972 Effects of Parental Attitudes and Modern Exposure on Chinese Traditional-Modern Attitude Formation. Journal of Cross-Cultural Psychology 3:201.

Following recent Traditional-Modern attitude change regarding research, additional evidence to support traditional-modern attitude change hypotheses is presented, and is concerned with the relative effects of parental socialization and other modernizing influences on attitude change among groups of Hong Kong Chinese. Younger Hakka village children were found, as expected, to have significantly more traditional attitudes than other children, while their traditional-modern attitudes also correlated more highly with those of their parents. Two matched

adolescent Anglo-Chinese and Chinese Secondary samples were also chosen to examine the relative effects of parental socialization and mass media on attitude change. Both parental T-M attitudes and exposure to mass media were relevant to the development of student's T-M attitudes at the Anglo-Chinese school but for the Chinese Middle school only parental T-M attitudes were relevant, not exposure to mass media.

Diop, A.

1968 Kinship and the Wolof Family. Annales Medico Psychologiques 2:398.

Deals with developments in the traditional kinship structure of the Wolof people (Sudan and Senegal), from the matriarchal and bilateral to the patriarchal system, as a result of Islamic influence. Wolof family organization is also studied within the context of changes due to colonization and the expediency of a monetary economy, focusing on how the traditional family gradually breaks up to make way for couples, even in rural areas. JA

Douglas, Mary

1968 The Relevance of Tribal Studies. Journal of Psychosomatic Research 12:21-28.

Insight into tribal rituals can be found by studying their social dimensions. The 2 main functions of tribal rituals are coercion in social situations and the expression of a vision of the essential nature of society. The central problem of interpretation of the ritual is the relation between individual psychological needs and public social needs. The public ritual expresses the latter public concern and not the former individual concern. Illustrations are provided by general reproductive rituals. JA

DuPeez, Peter, and D. G. Ward

1970 Personal Constructs of Modern and Traditional Xhosa. Journal of Social Psychology 82:149-160.

Based on data gathered from 40 working adults and 40 youths, several differences were found between modern and traditional Xhosa. Members of the modern group showed greater homogeneity in construing themselves, used more permeable constructs which covered wider ranges of events, and had the self and ideal self more closely related than in the traditional group. The greater diversity of self-constructs in the traditional group is taken to imply that it is falling apart, and that there is low agreement about how members ought to see themselves, a conclusion which is confirmed by the low self-ideal correlations in this group. JA

Edgerton, Robert B.

1971 A Traditional African Psychiatrist. Southwestern Journal of Anthropology 27:

Accounts of African ethopsychiatry have typically emphasized suggestion and the placebo effect. In this account of a Hehe traditional psychiatrist from Tanzania, these considerations are important, but of equal importance is his emphasis upon botanical and pharmacological empiricism. Despite the fact that his epistemology of mental illness is developed within a belief system that emphasizes witchcraft and moral magic, and although he has become expert in dealing with such supernatural considerations, he is primarily a pragmatic psychoparmacologist. His devotion to empiricism in botany and pharmacology, while unusual among his people, may nevertheless have historical antecedents among the Hehe and may be more common throughout African ethnopsychiatry than has yet been recognized. This African psychiatrist--like so many of the men who built Western psychiatry—serves to remind us that even within a supernatural belief system the beginnings of science may emerge.

Edgerton, Robert B., and Marvin Karno

1971 Mexican-American Bilingualism and the Perception of Mental Illness. Archives of General Psychiatry 24:286-290.

Presented a household survey interview to 444 Mexican-Americans and 224 Anglo-Americans on beliefs and perceptions of mental illness. The 2 groups did not differ significantly, but there were significant differences within the Mexican-American group. Ss who completed the interview in Spanish differed from those who took it in English in beliefs on a) depression, b) juvenile delinquency, c) the inheritance of mental illness, d) the effectiveness of prayer, and e) the value of familistic orientation. Results suggest that the more commonly described cultural traits of the Mexican-American are most applicable to those who speak only or mostly Spanish. Findings indicate "the need for mental health professionals who possess both fluency in Spanish and sensitive understanding of the culture of the Mexican-American poor." JA

El-Islam, M. Fakhr, and Samia A. Ahmed

1971 Traditional Interpretation and Treatment of Mental Illness in an Arab Psychiatric Clinic. Journal of Cross-Cultural Psychology 2:301. Traditional interpretations of beliefs commonly entertained and rituals commonly practiced among a sample of 153 Arab psychiatric patients were studied. Ritual practice associated significantly with illiteracy and with the presence of observable disorders of behavior. The interpreratione-ritual relationship is not, however, of a one-to-one nature. The belief that general physical weakness is the cause of psychogenic symptoms is exposed and its implications for therapy are discussed from the traditional and medico-psychological angles.

Feaster, J. Gerald

1968 Measurement and Determinants of Innovativeness among Primitive Agriculturists. Rural Sociology 33:339-348. Investigated the innovativeness of "shifting cultivators," who were Mayan Indians in British Honduras. Attitude statements were used to construct both an innovation and a traditional scale. It was assumed that those favoring the statements in the innovation scale were implicitly expressing a willingness to internalize values demanded by a nontraditional agriculture, and those scoring positively in the traditionalism scale were apathetic toward changes in their way of life. In general, the shifting cultivators had favorable attitudes toward innovation. Results of multiple regression analyses show that age, education, level of living, contact with extension agents, and aspirations were significant variables related to the modification of traditional attitudes. JA

Feldman, David H., and Winston Markwalder

1971 Systematic Scoring of Ranked Distractors for the Assessment of Piagetian Reasoning Levels. Educational and Psychological Measurement 31:347-362.

Attempted to determine if a map reading test could be used to assess both a child's map reading skill and his level of reasoning ability according to Piaget's theory of cognitive development. The latter would be assessed by the analysis of the child's choice of distractors. A new instrument for measuring spatial reasoning was designed and validated based on conceptual analysis of a geographic map. All 25 items were designed to induce responses indicative of the 4 reasoning levels suggested by Piaget. The sample included 270 5th, 7th and 9th graders evenly distributed across 3 different ethnic groups (black, while, and Chinese). The results tend to indicate that the instrument devised may be capable of measuring reasoning stage levels as well as map achievement. Results also show that children of different ethnic backgrounds tend to go through the same set of developmental stages and that children of specific developmental levels tend to select distractor indications of that level. JA

Friedman, Neil

1969 Africa and the Afro-American: The Changing Negro Identity. Psychiatry 32:127-136.

Advances the theory that the emergence of Africa on the international scene, as well as the interest in African history without the colonial veil, gives the American Negro a new positive identification. Previously the identity of blacks was characterized by negative images, but now it is becoming more positive because of an improved view of Africa and the position of the black man as a serious figure in the political world. JA

Garber, Malcolm

1968 Ethnicity and Measures of Educability: Differences among Navajo, Pueblo and Rural Spanish American First Graders on Measures of Learning Style, Hearing Vocabulary, Entry Skills, Motivation and Home Environment Processes. Ph.D. dissertation, University of Southern California. Sixty-five Navajo, sixty-five Rural Spanish-American, and seventy-five Pueblo children were given a battery of psychological tests including the following. 1. The Illinois Test of Psycholinguistic Ability. 2. The Peabody Picture Vocabulary Test. 3. The Preschool Inventory. 4. A nonstandard entry skill scale. 5. A set of Motivation items related to self-esteem, mother-father identification, reward preference, locus of control and test/school anxiety. The parents of the children were interviewed with the Environmental Process Characteristics Questionnaire. The measures were selected on the basis that educationally relevant prescriptions could be generated. These prescriptions should assist in the facilitation of English language arts skills development for the culturally divergent groups of children studied. The major null hypothesis was that there would be no differences among the Navajo, Pueblo, and Rural Spanish first graders along the following general dimensions: Learning Style, English Language, Hearing Vocabulary, Entry Skills, Motivation, and Environmental Process Characteristics. Each one of these dimensions were measured using the above mentioned tests. There was enough similarity within each group studied to plan educational programs for each group as a class rather than for each individual in the group. However, each group was substantially different, suggesting that separate curricular planning for each group as a class rather than for each individual in the group. JA

Gardiner, Harry W., and Dalad Lematawekul

1970 Second-Generation Chinese in Thailand: A study of Ethnic Identification. Journal of Cross-Cultural Psychology 1:333.

This study investigated the ethnic identification of second-generation Chinese in Thailand. One hundred and seventy-six adolescents 14-18 years of age (92 males, 84 females) were separated into 1) those who used Chinese family names and those who used Thai family names and 2) those who had attended Chinese schools and those who had not attended such schools. The following measures were employed: Behavioral Differential Scale, Assimilation-Orientation Inventory, California Fascism Scale, Conformity Scale, and the Gough-Sanford Rigidity Scale. It was hypothesized that 1) second generation Chinese who used Chinese family names whould have a higher degreee of identification with Chinese than those who used Thai family names; 2) those who had attended Chinese schools would identify more closely with Chinese than those who had not attended such schools; and 3) scores on the F-scale, C-scale, and R-scale would be positively correlated with the degree of Chinese identification. Analysis of results indicates support for the first two hypotheses but not for the third. Possible areas of future research are suggested.

Goldschmidt, Walter

1973 Guilt and Pollution in Sebei Mortuary Rituals. Ethos 1:75.

This analysis of Sebei death ceremonials deals directly with the interplay between the private motivations of the individual and the structural context within which they operate. The symbolic meaning of the rituals themselves is thus seen as mediating between the private and internal psychological tensions and the public demands that are made upon the persons.

Grey-Little, Bernadette

1973 The Salience of Negative Information in Impression Formation Among Two Danish Samples. Journal of Cross-Cultural Psychology 4:193.

Two Danish samples were asked to rate an unknown other based on two descriptions, one containing praiseworthy and the other reproachable behaviors. With both samples, negative descriptions had a delayed disproportionate effect on the impression formed. The results for Danish subjects are similar to those found with Americans in spite of broad social and cultural differences which would seem to militate against this similarity.

Harrison, Robert H., and Edward H. Kass

1968 MMPI Correlates of Negro Acculturation in a Northern City. Journal of Personality and Social Psychology 10:262-270.

Compared MMPI data from three groups of pregnant women living in a northern city: Negroes born in the south (SN), Negroes born in the north (NN), and whites born in the north (W). Five of sixteen MMPI scales, twenty of twenty race-sensitive factor scales, and 166 of the 550 MMPI items differentiated among groups at statistically significant levels. The NN group was halfway between the SN and W groups on the majority and items examined. Results are interpreted as reflecting a process of Negro acculturation to the predominantly white urban society.

Hoffman, Michel

1970 Toward a Typology of Attitudes and Aspirations of Young Africans Who are Faced with Modernization. Revue Internationale de Sociologie 6:147-159.

Interview Data Collected in 1968 from 1,000 15-30 year old young Africans were organized into a typology of attitudes toward modernization. Questions dealt with current social changes, transitional difficulties, traditional customs, and the modern nation. Based on descriptions of a "successful acquaintance," 3 types emerged: those with no such model (predominantly illiterate, rural and female), those with an agrarian village model (27%), and those with a modernized success model (43%). Within these types, subgroups were distinguished according to life satisfaction or discontent. JA

Hsu, Francis L. K.

1973 Prejudice and Its Intellectual Effect in American Anthropology: An Ethnographic Report. American Anthropologist 75:1.

This article deals with some deep forms of prejudice in American anthropology in terms of its dominant ideas and its products. The foundation of this prejudice seems to be Western individualism. It expresses itself by excluding contrary ideas from its public forums and by elaborating and escalating ideas in conformity with it. In spite of its cross-cultural protestations, American anthropology will become White American anthropology unless our fraternity consciously takes a more open-minded approach to other competing assumptions—rooted in other cultures—about man and what makes him run. There is a world of difference between a truly cross-cultural science of man and a White centered science of man with cross-cultural decorations. AA

Iwai, Hiroshi, and David K. Reynolds

1970 Morita Therapy: The Views from the West. American Journal of Psychiatry 126:1031-1036.

Discusses various Western interpretations of Morita therapy, a Japanese method of treating neurosis. The divergence of opinion are approached through 5 topics, including the relationship of Morita therapy with Zen Buddhism and its emphasis on bed rest and work therapy. It is concluded that personal and social background and research setting influence differing understandings of Morita therapy. JA

Jamias, Maria F., Renato Y. Pablo, and Donald M. Taylor

1971 Ethnic Awareness in Filipino Children. Journal of Social Psychology 83:157-164.

Investigated Filipino children's self-perception in terms of ethnic identity and assessed how accurately they recognized sketches of persons representing 2 important out-groups, i.e., Americans and Chinese. Each of the 90 Tagalog male Ss (6, 8, and 10 year old) was administered a picture identification test designed to assess Ss' ethnic affiliation. Results demonstrate that the frequency of identifying with an ethnic group increased with age and that children identified more often with their regional group than with the national group. Ss were more accurate in recognizing Chinese pictures than those representing Americans, implying that accuracy of ethnic perception is related to the frequency of contact with the group. JA

Jayagopal, Rajabather

1970 Problem Solving Abilities and Psychomotor Skills of Navajo Indians, Spanish Americans and Anglos in Junior High School. Ph.D. dissertation, University of New Mexico.

The purpose of this study was to investigate the problem solving abilities of Navajo Indians, Spanish Americans and Anglos in two schools of Albuquerque, using WISC performance subtests as criterion measures and including the five psychomotor skills, perception, visual set, emotional set, physical set and fine motor acts as predictor variables at intra- and inter-ethnic levels. The study was divided into the following parts 1) review of the pertinent literature, 2) design of the study outlining selection of subjects, selection and application of test instruments and compilation and treatment of data 3) presentation, analysis and interpretation of the data and 4) conclusions and recommendations. There is a significant relationship between problem solving abilities and psychomotor skills for all the subjects included in this study. There are significant relationships between the WISC performance subtest of Block design and the five psychomotor skills of perception, emotional set, visual set, physical set and fine motor acts. There are significant relationships between the WISC performance subtests of Object Assembly and the five psychomotor skills listed previously. There is a significant relationship between the WISC Coding performance subtest and one of the five psychomotor skills, the fine motor acts. The Navajos' performances were significantly higher in emotional set, visual set and fine motor acts than those of the Spanish Americans. The Navajo performances in fine motor acts were significantly higher than those of the Anglos. Similarly, the Navajo performances were significantly higher in the WISC Coding performance subtest than those of the Spanish Americans and Anglos involved in this study. The Anglos involved in this study performed significantly higher in physical set and fine motor acts than did the Spanish Americans. In the WISC Object Assembly performance subtest, the Anglos performed significantly higher than the Spanish Americans. The performances of the Spanish Americans involved in this study were at a lower level in all three WISC performance subtests and on the five psychomotor skills than were those of the Anglos and Navajos.

Kagitcibasi, Cigdem

1973 Psychological Aspects of Modernization in Turkey. Journal of Cross-Cultural Psychology 4:157.

Attitudinal, aspirational, familial, and social structural variables were assessed among Turkish high school students. Two main personality types emerged. Type 1, the traditional, was characterized by core authoritarianism, anomia, pessimism about personal future, belief in external control of reinforcement, and religious orientation. Type 2, the modern, was characterized by optimism about personal future, belief in internal control of reinforcement, and achievement orientation. Type 2 was found to develop in a family atmosphere characterized by affection, whereas Type 1 was associated with family control. Family control, in turn, was found to be more characteristic of immobile, lower-SES, and rural homes, whereas family affection characterized upper-SES homes. Thus, social structural variables affected attitudinal dispositions, and specifically modernity, through the mediating role of the family. Sex differences in modernity were also observed.

Kelly, Richard, Raymond Cazabon, Charles Fisher, and Roger Laroque

1970 Ethnic Origin and Psychiatric Disorders in a Hospitalized Population. Canadian Psychiatric association Journal 15:177-182.

Explored the relationship between ethnic origin and the incidence of different types of psychiatric disorders within a hospitalized Canadian population. Results indicate differences in the distribution of patients among the major diagnostic classifications as a function of ethnic background. In the male population, Ss of British origin showed a higher incidence of alcoholism and a lower incidence of psychosis than Ss of French and other backgrounds. Among the males diagnosed as psychotic, Ss of French and other backgrounds showed a larger percentage of schizophrenic reactions and smaller percentage of affective psychosis among the Ss of other origins. Several tentative hypotheses are offered. It is felt that the major significance of the findings is the indication that the Canadian population offers potential for research into the relationship between cultural factors and mental illness. JA

Kennedy, John G.

1969 Psychosocial Dynamics of Witchcraft Systems. International Journal of Social Psychiatry 15:165-178.

Based on the arguments presented, "it no longer seems useful to perpetrate the anthropological notion of witchcraft as a 'positive philosphy' which functions to maintain social order and continuity." It is also argued that "witchcraft systems are forms of institutionalized patterns of psychopathology which tend to be pathogenic... and which create built-in self-perpetrating stress systems." An attempt is made "to indicate how witchcraft systems as a consequence of their inherent psycho-social synamics tend to regularly generate the hate and aggression which they allegedly function to relieve... The modern witchfinding movements of Africa are concrete evidence of the intense psycho-social stress potentially inherent within witchcraft systems." JA

King, Michael, and Johanna King

1971 Some Correlates of University Performance in a Developing Country: The Case of Ethiopia. Journal of Cross-Cultural Psychology 2:293.

Language background, educational background, and scores on a variety of achievement and aptitude tests were examined for their relation to the first semester performance of 1,123 freshman students at the Haile Selassie I University in Ethiopia. Among the test data, proficiency in English language skills was most strongly related to university grades. Scores from tests requiring skill in the official Ethiopian language, Amharic, predicted poorly to university performance, and tests of mathematic-numerical ability showed moderate to weak predictive utility. The only language or educational background data related to performance was educational mobility, the students' tendency to move to areas of greater educational resources during their pre-university education. This mobility was interpreted as reflecting strong motivation for education, a factor which deserves further research attention.

Kloskowska, Antonina

1966 Symbolization Process and Social Interaction: Towards the Definition of the Sociology of Culture. Polish Sociological Bulletin 2:8-19. Discusses the theoretical relationships between the spheres of social and cultural phenomena as a critical point in determining the object of a sociology of culture. This dichotomy is then reduced to the establishment of 3 models to describe the relations between social interaction and the symbolization process toward defining the sociology of communication. It is concluded that a definition of the sociology of culture requires the conceptualization of continual exchange between personal interaction on one hand, and genetic and communicative symbolization on the other. JA

Kraemer, Alfred J.

1969 The Development of Cultural Self-Awareness: Design of a Program of Instruction. HumRRO Professional Paper 27-69.

Describes the design of a training process for developing cultural self-awareness, i.e., awareness of the cultural nature of one's own cognitions. Spontaneous interactions of Americans with foreigners in simulated on-the-job encounters are video-taped. Different behavioral manifestations of particular cognitions and their relation to American cultural premises and values are show in sequences of video-taped excerpts used for training. The training is intended to enhance the effectiveness of United States personnel in overseas assignments. JA

Kraus, Robert F.

1968 Cross-Cultural Validation of Psychoanalytic Theories of Depression. Pennsylvania Psychiatric Quarterly 8:24-33.

Reviews a study on the Ashanti of central Ghana by M. J. Field, relating organic, social, and multiple cultural factors which produce psychological susceptibility to depression among Ashanti women. An overview of the culture emphasizing changes occasioned by the disruptive force of European and Christian influence producing an unstable social system is presented. Depression literature is reviewed in relation to the ethnographic data. JA

Kubany, Edward S., Ronald Gallimore, and Judith Buell

1970 The Effects of Extrinsic Factors on Achievement-Oriented Behavior: A Non-Western Case. Journal of Cross-Cultural Psychology 1:77

It has been suggested that the Western conception of intrinsic motivation may be irrelevant among cultures which attach significance to group acceptance. To test this hypothesis, Filipino high school boys in Hawaii were asked to perform a task either in the presence of the experimenter or in anonymous privacy. Pretask instructions implied that striving to do well is highly desirable. As predicted, subjects in the public condition showed more achievement-oriented behavior (greater preference for a moderately difficult task). The results were discussed in terms of a distinction between intrinsic and extrinsic motivation and in terms of the effects of situational variables upon achievement-oriented behavior.

Lammers, Donald M.

1969 Self-Concepts of American Indian Adolescents Having Segregated and Desegregated Elementary Backgrounds. Ed.D. Syracuse University.

The purpose of this study was to compare the self concepts and academic achievement of two select groups of Onondaga Indians (one group educated in a segregated elementary school and the other in a desegregated elementary school) and a select group of white students attending junior high school. In view of the findings of the study, the following conclusions can be stated: 1) There is evidence to indicate that significant differences in obtained elementary school grade point averages do exist among segregated Indian, desegregated Indian, and white students.

In comparing the three groups, the median grade point average in order from lowest to highest was desegregated Indians, segregated Indians, and whites. 2) There is no significant evidence to indicate that, as measured by the Self-Social Symbols Tasks and Self-Concept of Ability Scale, differences exist in terms of self concept among segregated Indian, desegregated Indian, and white students. 3) There is evidence to indicate that significant differences in class ranking, as measured by a class ranking instrument, do exist among segregated Indian, desegregated Indian, and white students. The white students had the highest percentage above the class median in junior high school English, mathematics, and social studies. The segregated Indians had the highest percentage above the class median in art and music. The desegregated Indians did not have the highest percentage in any of the five categories. 4) There is no significant evidence to indicate that, as measured by the Questionnaire on Attitudes Toward Different Testing Situations differences exist in terms of text anxiety among segregated Indian, desegregated Indian, and white students. Certain aspects of the results of this study do support the popular notion that there are social and educational advantages to be derived by Indian students educated in predominantly white elementary school culture and environment. The amont of possible effect on the Indians by the whites appear to be dependent on how well the Indians' culture and expectations match that of the white society which surrounds them.

LeCompte, William, and Guney K. LeCompte

1970 Effects of Education and Intercultural Contact on Traditional Attitudes in Turkey. Journal of Social Psychology 80:11-21.

152 girls from the first and third year at two different high schools in Istanbul, Turkey, rate their approval of 35 statements describing traditional and individualistic actions. The statements were weighted to yield scores for seven issues involving the person in relation to his family. A separate sample of 180 high school seniors from other towns in Turkey was used to validate the directions of the scales. Correlated sample tests with the latter sample indicated that fathers were rated as significantly more traditional on six of the seven issues. Analysis of variance results for the Istanbul data supported the hypothesis that scores would be less traditional with greater education and with attendance at a foreign school. The greatest differences occured in issues involving independence on career choice and relations between the sexes, while religious practices and respect for elders showed least change.

1973 Generational Attribution in Turkish and American Youth: A Study of Social Norms Involving the Family. Journal of Cross-Cultural Psychology 4:175.

One hundred seventy-four Turkish and 171 American adolescents rated their own and their father's approval of 35 statements describing traditional or individualistic actions. The statements were weighted to yield scores on seven family-related issues, and the latter scores were factor analyzed. Factor scores were submitted to analysis of variance to determine the effects of culture, sex, and generational attribution (self versus father-ratings). Predictions of greater approval of individualistic actions for American versus Turkish respondents, self-versus father-ratings, and males versus females were all supported with the "Independence-in-Choice" factor (p. 01). On the "Traditional-Respect" factor, the mean for American self-ratings alone approved of independent actions, different from all other means (p. 01). The possibility of sequential stages of change in different attitude domains was discussed.

Lefley, Harriet P.

1972 Modal Personality in the Bahamas. Journal of Cross-Cultural Psychology 3:135.

Modal personality of a colonial people evolving toward independence was investigated. The research was presented as Phase I of a longitudinal study of behavioral adaptation to sociopolitical change. A questionnaire and 40-item Sentence Completion Test, tapping aggression, anxiety, authority relations, dependency, interpersonal attitudes, values and aspirations were administered to a representative sample of 160 Bahamian adults. Passivity, hostility/acquiescence toward authority, internalization of anger, lack of achievement orientation, and a strong emphasis on interpersonal relations and psychological equilibrium, with a concurrent de-emphasis of economics, were modal characteristics. Despite significant differences in percentage response, groups differentiated by age, sex, SES, education, and father-absence were alike in central tendency. Comparative data from Thailand and the Philippines were presented. The relationship of modal personality to historical factors, and its implications for sociocultural change, were also discussed.

Lieblich, Amia, Anat Ninio, and Sol Kugelmass

1972 Effects of Ethnic Origin and Parental SES on WPPSI Performance of Preschool Children in Israel. Journal of Cross-Cultural Psychology 3:159. A Hebrew translation of the Wechsler Preschool Primary Scale of Intelligence was administered to 1072 Israeli-born children aging 4 to 6 1/2 years. Groups originating from Israel, East Europe, Middle East and North Africa, all subdivided into High vs. Low SES groups, were identified. The eight groups differed significantly in the *level* but usually not in the *pattern* of the subtests' scores. First generation Oriental children performed relatively lower, but the gap between second-generation Israeli children of Oriental and Western origin is notably diminished.

Littig, Lawrence W.

1971 Motives of Negro Americans Who Aspire to Traditionally Open and Closed Occupations. Journal of Cross-Cultural Psychology 2:77. The aspirations of Negro American college students to occupations which traditionally have been open or closed to them were examined as functions of a) the predominantly middle or working class status of the college attended and b) individual differences in achievement, affiliation, and power motivation. Among Negro students in a middle class Negro college aspiration of traditionally open occupations was associated with weak affiliation motivation. Among students attending a predominantly working class Negro college, strong achievement motivation and strong power motivation were related to aspiration to traditionally closed occupations. It was inferred that the personality basis for occupational integration may differ as a function of the social class milieu in which the Negro student is functioning at the time he makes occupational decisions. Replication on minorities in other nations is suggested.

Lystad, Mary H.

1970 Adolescent Social Attitudes in South Africa and Swaziland, American Anthropologist 72:1389.

A content analysis was undertaken of stories written by adolescents in urban townships in South Africa and in an urban setting in Swaziland. The findings concerning the nature of the actors and the relationships between actors in the stories suggest that though South Africans in their early years encountered more elements of modernity than do the Swazis.

McKendry, James M., Margaret S. McKendry, and George M. Guthrie

1972 Inflated Expectations and Social Reinforcement in the Lowland Philippines. Journal of Cross-Cultural Psychology 3:83.

Two alternative hypotheses of the psychological impact of planned social change in the lowland Philippines were investigated. 1) Planned social change produces social reinforcement which leads to a more content population; or 2) it leads to a cycle of rising expectations which outstrip actual accomplishment, the result of which is dissatisfaction and hostility—especially among young people. Results in general favored the social reinforcement hypothesis. Efforts aimed at increasing a community's level of development tend to produce more modern value systems and increased general contentment. However, they also tend to produce a greater emphasis upon the local government to continue to meet the needs of people.

Madsen, Millard C.

1971 Developmental and Cross-Cultural Differences in the Cooperative and Competitive Behavior of Young Children. Journal of Cross-Cultural Psychology 2:365.

A two-person experimental task was developed for use in the study of age and cultural differences in the cooperative-competitive behavior of children in a small Mexican town and in California. The results indicate a higher level of cooperation among Mexican than among Anglo-American children and an increase in nonadaptive competition with age among the Anglo-American children.

Madsen, Millard C., and Ariella Shapria

1970 Cooperative and Competitive Behavior of Urban Afro-American, Anglo-American, Mexican-American and Mexican Village Children. Developmental Psychology 3:16-20.

In 3 experiments, 48 7-9 year old children from each of 3 ethnic groups in the United States performed on the cooperation board developed by M. C. Madsen. In Experiment I, Mexican-American boys were less competitive than Mexican-American girls and Afro- and Anglo-Americans of both sexes. In experiment II, all 3 groups behaved in a highly competitive manner. In Experiment III, the 3 groups behaved in a nonadaptive competitive manner while 36 7-9 year old village children in Mexico behaved cooperatively. JA

Marconi, Juan

1969 Cultural Barriers in Communication which Affect the Growth of Programs for the Control and Prevention of Alcoholism. Acta Psiquiatric y Psicologica de America Latina 15:351-355.

Describes problems in reaching Chile's 3 cultural types—and educated middle class guided by scientific theory, a large working class guided by folk medicine, and the aborigines who practice a medicinal ritual. A survey showed alcoholism to be a large problem among the lower classes, particularly the aborigines. Existing programs for alcoholism at the National Health Service and the University of Chile are reviewed and suggestions are made for a more affective program.

Marsella, Anthony, David Kinzie, and Paul Gordon

1973 Ethnic Variations in the Expression of Depression. Journal of Cross-Cultural Psychology 4:435.

Samples of Americans of Japanese, Chines, and European ancestry evidencing clinical levels of depression were administered a depression symptom checklist, and the results were submitted to a factor analysis. Groups differed with respect to the functional dimensions expressed by the patterns. In general, existential symptoms dominated the patterns of the Japanese and Caucasians, while somatic symptoms were more characteristic of the Chinese. In addition, the Japanese evidenced an interpersonal symptom pattern, and both oriental groups manifested a cognitive symptom pattern. A theory was proposed which suggested that symptoms are related to extensions of the self-conditioned via socialization experiences. The role of individual differences, stress, and cultural definitions of disorder in determining the expression of depression was also discussed.

Mason, Evelyn P.

1969 Cross Validation Study of Personality Characteristic of Junior High School Students from American Indian, Mexican, and Caucasion Ethnic Backgrounds. Journal of Social Psychology 77:15-24.

A cross-validation study of the responses of 22 American Indian, 9 Mexican-American, and 16 Caucasian adolescents to the CPI showed an overall significant ethnic difference ordered with Caucasian highest and Indian lowest. This ordering did not occur in the 1st study and resulted from the more negative response of the Mexican male and more positive reponse of the Mexican female in the 2nd study. The evidence of a generalized more negative response by females regardless of ethnic background was validated, however. Of greatest significance was the consistent, all pervasive negative responses of both male and female American Indians. JA

Masuda, Minoru, Gary H. Matsumoto, and Gerald M. Meredith

1970 Ethnic Identity in Three Generations of Japanese Americans. Journal of Social Psychology 81:199-207.

Ethnic identification in 3 generations of Japanese Americans in Seattle, Washington, was quantified with a 50-item Ethnic Identity Questionnaire. The total ethnic identity scores were significantly different across generations in the hypothesized direction, 1st, 2nd, 3rd. No difference was seen between sexes within generations. Acculturation of the immigrant, 1st generation was indicated by item score analyses as was the presence of a considerable residual of Japanese ethnic identity in the 3rd generation Japanses-American. Education and socioeconomic status were negatively associated with ethnic identification and Buddhist religion was not a significant factor.

Masuda, Minoru R. Shin Hasegawa, and Gary Matsumoto

1973 The Ethnic Identity Questionnaire: A Comparison of Three Japanese Age Groups in Tachikaws, Japan, Honolulu, and Seattle, Journal of Cross-Cultural Psychology 4:229.

Three generational age groups of Japanese in Tachikawa, Janan, Honolulu, and Seattle were compared on their responses to the Ethnic Identity Questionnaire. At all locations, there was an attenuation of ethnic identification, here seen to be defined by the instrument as Meiji Era Japaneseness. The elderly were cross-culturally consensual in their attitudes. The Seattle and Honolulu second-and third-generation Japanese-Americans were more similar to each other than to their Tachikawa age counterparts. The lower Honolulu scores were attributed to their greater social, economic, and political power. In Tachikawa, there was a continuity of Japanese pride, but increasingly fragmented attitudes in family kinship and tradtional behavior and attitudes.

Melamed, Leslie

1968 Race Awareness in South African Children. Journal of Social Psychology 76:3-8.

The relative value of 4 physiognomic features which distinguish between the races in South Africa was examined at age levels 6, 8, and 10. No age differences were found and skin color appeared to be the most dominant cue used when it was available. Age differences in learning to discriminate between the other cues were found. This suggests that age differences found in racial awareness of children older than 6 could be an artifact of the test situation. JA

1970 Mac Crone's Race Attitudes Scale: Thirty Years After. Psychologia Africana 13:202-208.

Administered I.D. Mac Crone's scale of ethnic attitudes to 57 undergraduates. Results were compared with those obtained by Mac Crone in 1937. Marked changes were observed in the scale and Q values. The changes in scale values were partly explained by a change in the method of scale value assessment and by changes in Ss' perceptions of the items. Q value changes were possibly due to the smaller sample and a nonuniform shift in ratings of items. It is concluded that while the scale can still be used for ordering respondents on a continuum, it cannot be used to determine absolute position on the scale. JA

Miller, A. G.

1973 Integration and Acculturation of Cooperative Behavior Among Blackfoot Indian and Non-Indian Canadian Children. Journal of Cross-Cultural Psychology 4:374.

Teams of boys from an integrated elementary school played a game on the Madsen Cooperation Board which, while permitting either cooperative or competitive behavior, rewarded cooperative behavior. Indian teams, all-while teams, and integrated teams all showed a similar pattern of behavior on the games. This pattern was marked differently from the behavior patterns which have been demonstrated for either Blackfoot or white children from nonintegrated schools. The behavior of all the groups from the integrated schools was midway between that of nonintegrated white and Blackfoot children in terms of the frequency of cooperative responses. The data are discussed in terms of acculturation and the effects of integrated schooling.

Niehoff, Arthur H., and J Charnel Anderson

1968 The Primary Variables in Directed Cross-Cultural Change. HumRRO Professional Paper 36-68:26

Compared 171 cases of cross-cultural change projects, and extracted factors that acted as sanctions or barriers in the introduction of innovations. Three types of behavior were noted: a) techniques of the change agent, e.g., communication, demonstration, and flexibility; b) motivation--in the form of felt need, practical economic benefit, novelty--for acceptance or rejection by the recipients; and c) reaction produced by the traditional cultural patterns, e.g., leadership, theological beliefs, and economic patterns. JA

Okana, Yukio, and Bernard Spilka

1971 Ethnic Identity, Alienation and Achievement Orientation in Japanese-American Families. Journal of Cross-Cultural Psychology 2:273.

The need for a strong identification with one's traditional heritage has been a chief tenet voiced in minority group movements. To test the hypothesis that ethnic identity counters the alienative feelings attributed to minority status and supports achievement values, samples of Japanese-American high school students and their mothers were evaluated. These subjects represented Sansei and Nisei Japanese Americans, respectively. They were selected from Buddhist and Christian churches in Denver, Colorado. Buddhist mothers were found to be more ethnically identified than Christian mothers, but their children did not differ in ethnic identity. Buddhist adolescents scored higher in both achievement orientation and alienation compared with Christian adolescents. These differences were discussed in their possible relation to differential home environments.

Orpen, Christopher

1971 The Relationship Between Extra Version and Touch-mindedness in a "Tough Minded" Culture. Journal of Psychology 78:27-29.

Tested the hypothesis that social attitudes are not closely related to deep-lying personality trends in cases where the social attitudes are culturally sanctioned. 90 Afrikaans-speaking South African school children brought up in the relatively "tough-minded" Afrikaans cultural climate were given measures of tender-mindedness, extroversion, and social distance. Ss were given the Eysenck Personality Inventory, Eysenck's Tender-Mindedness scale, and the Bogardus social distance scale. The correlation between the personality dimension of extroversion and tender-minded attitude was negligible, supporting the hypothesis. This major finding and others are discussed in terms of the cultural determination of the relationship between extroversion and tough-minded attitudes. AA

Ortner, Shery B.

1973 Sherpa Purity. American Anthropologist 75:49.

This paper explores the relationship between explicit cultural forms "symbols" and underlying cultural orientations. It assumes the position that the two are intimately interrelated, indeed inseparable, and further that it is the symbolic forms themselves which are the mechanisms linking underlying cultural orientations to observable modes of socio-cultural action. These points are elaborated through a detailed analysis of one such body of cultural forms, the set of phenomena considered polluting among the Sherpa of Nepal.

Osborne, Olive H.

1969 The Yoruba Village as a Therapeutic Community. Journal of Health and Social Behavior 10:187-200.

Among the Egba-Ebgado Yoruba peoples of Nigeria there are several village psychiatric treatment programs. Nigerian psychiatrists believe that such village programs have greater therapeutic and economic efficacy than treatment modalities and structures commonly found in Western society. The identification and assessment of social and cultural elements which enhance or detract from the therapeutic potential of the village treatment programs are discussed. Psychological, social and cultural data are utilized to suggest comparisons between Yoruba therapeutic communities and Western psychiatric communities. The potential of these programs and further refinement of the concept "therapeutic community" are also considered.

Peres, Yochanan, and Zipporah Levy

1969 Jews and Arabs: Ethnic Group Stereotypes in Israel. Race 10:479-492.

Discusses the concept stereotype and investigates "the stereotype which Arabs and Jews have of each other, and also the stereotyped image each group has of itself." 60 Arab and Jewish undergraduates were interviewed. The image of centrality, inferiority, deprivation, interdependence, salience and visibility, and the political and spritual attitudes of the minority and majority are discussed and compared. JA

Ramon, Shulamit

1972 The Impact of Culture Change on Schizophrenia in Israel. Journal of Cross-Cultural Psychology 3:373.

This Israeli-based study considered the hypothesis that culture change, as a social process, can influence a family involved in this process to the point that one of its offspring exhibits schizophrenic behavior. The sample consisted of forty triads (parents and their young adult son) divided into four groups according to the variables of country of origin (Poland and Yemen) with and without a schizophrenic offspring. Interactions between cultural deviance and defects in communication was assumed. It was hypothesized that the group of families of schizophrenics expected to be higher on the cultural deviance score (Yemen) would be lower on defects in communication than the comparable group (Poland). Measures of the two interacting variables were derived from TAT stories given by each triad as a group. The findings confirm the hypothesis and thus allow the conclusion that, at present, defects in communication are conducive to cultural deviance in families of the Schizophrenic-Yemen group.

Resner, Gerald, and Joseph Hartog

1970 Concepts and Terminology of Mental Disorders Among Malays. Journal of Cross-Cultural Psychology 1:369.

This paper presents the concepts and terminology of mental disorder as they emerged spontaneously from Malays, both urban and rural, of West Malaysia during nearly 2 years of interviewing and examining patients and nonpatients. Translated into a Western framework and summarized, the concepts are: heredity, periodicity, congeniality, brain strain, stress (including interpersonal), susceptibility, infection, contagion, delayed onset, conditioning, and resistance. The parallelism between these folk and modern concepts suggests certain universal bases and clues to labeling and treatment of mental disorders. The study revealed existence of a skeletal community mental health program.

Rodgers, William B., and Richard E. Gardner

1969 Linked Changes in Values and Behavior in the Out-Island Bahamas. American Anthropologist 71:21-35.

The relationships between observable changes in sociocultural behavior on the one hand and underlying value systems on the other is examined in two communities that stem from a single sociocultural tradition but that recently diverged because of differential exposure to economic development. Value preference of individuals in each community were elicited by structured questionnaires, which allowed operational measurement of values and statistical testing of differences within and between the

community samples. The findings are explained with reference to the nature of the behavioral responses of individual to perceived modifications (related to economic development) in their environment.

Ronch, Judah, Robert L. Cooper, and Joshua A. Fishman

1969 Word Naming and Usage Scores for a Sample of Yiddish-English Bilinguals. Modern Language Journal 53:232-235.

Reviewed the findings of a study using 8 male, and 7 female European-born Jewish adults who had used Yiddish as children and who continued in the United States for 40-60 years. The societal domains measured were home, ethnic behavior, work, neighborhood, and Jewish cultural activities. A Word Naming Test in English and Yiddish was administered, and analysis of variance revealed that the "ratio of English to Yiddish words named varied as a function of domains." Ss rated themselves as using the most English in the home domain. Compared with analogous Puerto Ricans, the Yiddish-English bilinguals use more English in the home domain than do the Puerto Ricans. JA

Rothbart, Myron

1970 Assessing the Likelihood of a Threatening Event: English Canadians' Evaluation of the Quebec Separatist Movement. Journal of Personality and Social Psychology 15:109-117.

Contrasted attitudes of 191 English Canadians living in Quebec with with attitudes of a comparable, nonthreatened group living outside of French Canada. Measures were obtained of: a) perceived causes of French Canadian dissatisfaction, b) perceived strength of the separatist movement,

c) amount of information regarding separatism, d) degree of opposition to separatism, and e) estimated likelihood of Quebec's eventual separatism from Canada. On the basis of group differences and within-group multiple regression analysis, it was observed that estimated likelihood of separation varied inversely with strength of opposition to separation, and directly with knowledge of the separatist movement. It is proposed that a S's estimate of the likelihood of a threatening political event was the result of 2 competing factors: a) his desire to minimize the prospect of an undesirable event, and b) his awareness of the social conditions giving rise to that event. It is argued that fear motivates denial of a threat, but that the strength of the denial process could be sharply attenuated by the knowledge of the threatening event. JA

Roy, Chunilal, Ajit Choudhuri, and Donald Irvine

1970 The Prevalence of Mental Disorders among Saskatchewan Indians. Journal of Cross-Cultural Psychology 1:383.

Indian communities in Saskatchewan are undergoing social changes as a result of rapid growth in populations and a closer contact with the non-Indian communities. The effect of such changes may be reflected in the nature and extent of the mental health problems among the Indian populations. This paper is an attempt to understand such problems in Saskatchewan. Analysis of hospital first-admission statistics at the North Battleford psychiatric institution, for the period from 1961 to 1966, showed that the Indian sample contained significantly higher numbers of schizophrenics and epileptics. These findings prompted an active case-finding survey for the first time in Canada in an arbitrarily defined geographical area which contained 18 rural municipalities (non-Indian) and ten Indian reserves. Analysis of the data revealed that the prevalence of mental disorder was significantly higher in the Indian communities. Furthermore, the Indian sample contained significantly higher numbers of schizophrenics and mental retardates. Findings are discussed in terms of relevance to future cross-cultural psychiatric research and methodological problems.

Sanday, Peggy R.

1971 Analysis of the Psychological Reality of American-English Kin Terms in Urban Poverty Environment. American Anthropologist 73:555.

The purpose of this paper is 1) to describe and explain variation in the psychological reality of American-English kinship terms; and 2) to examine the relationship between results obtained in two approaches which have been used to find psychologically real definitions of American-English kinship terms. A general hypothesis is proposed which accounts for variation in psychological reality in terms of life cycle and certain social role variables, as well as the individual's experiential knowledge of the domain under study. This hypothesis was accepted after it was revised to include the mediating influence of the content of what is stored in memory. The data for this study were collected in U. S. urban poverty environment.

Sanjek, Roger

1971 Brazilian Racial Terms: Some Aspects of Meaning and Learning. American Anthropologist 73:1126.

Harris notes that the New Ethnography has been characterized by a lack of quantitative methods. In a study of racial vocabulary in a Brazilian village, quantitative procedures are employed to show that, despite considerable ambiguity, a small portion of the corpus of 116 terms forms the cognitive map of most informants and organized the bulk of the domain. Data on how children acquire the vocabulary is used to demonstrate that skin color and hair form are the primary variables.

Sapir, J. David

1970 Kujaama: Symbolic Separation among the Diola-Fogny. American Anthropologist 72:1330-1348.

The Diola-Fogny concept of "kujaama" represents a complex symbol that defines a set of pollution rules having to do mainly with blood and food avoidance between generations and between husband and wife at the death of one or the other. Analysis of the diverse manifestations of *Kujaama* shows that each represents but one variant of a general principle, that is, the inauspiciousness of mixing separate categories. Further analysis places *kujaama* in the larger context of Fogny moral life and places the rituals associated with *kujaama* in the "grammar" of ritual acts and gestures.

Schmidt, J. J.

1967 Tribal Affinity in an Urban Bantu Community. Journal of Social Research 16:7-18.

Schwartz, Lola R.

1969 The Hierarchy of Resort in Curative Practices: The Admiralty Islands, Melanesia. Journal of Health and Social Behavior 10:201-209. Relates the treatment of illness in the Admiralty Islands to the assignment of illness to one of four main categories: a) interpersonal, soul damage by extrahuman agents b) interpersonal curing within group c) interpersonal sorcery outside of group and d) impersonal organic damage by an imminent impersonal agent. The first two causal assignments persist as explanations for illness with implications for traditional cures in every instance. The third and fourth assignments vary inversely with one another in priority of resort to native or European curative practices. An analysis of factors in the allocation of cases between European (acculturative) and native (counter-acculturative) curative agents is presented.

Schwartz, Theodore

1973 Cult and Context: The Paranoid Ethos in Melanesia. Ethos 2:153. The cargo cult as a type-response to culture contact occurs in the context of an area-wide paranoid ethos that underlies Melanesian cultures. This article considers an aspect of cargo cults as a mode of psycho-cultural adjustment generated in the interaction between the deep, persisting structures of Melanesian and Western cultures.

Shapira, Ariella, and Jacob Lomranz

1972 Cooperative and Competitive Behavior of Rural Arab Children in Israel. Journal of Cross-Cultural Psychology 3:353. Twenty groups of 9 to 11 year old boys and girls from an Arab village in Israel played a game which required cooperative interation among them to attain prizes. Half of the groups consisted of children of the same "Hamula" (extended family) and half of children from different Hamulas. It was found that boys were more cooperative than girls. Hamula boys were less cooperative than non-Hamula boys, and Hamula girls were more cooperative than non-Hamula girls. These Arab village results were compared with cooperation-competition among subjects from rural communities in Mexico, the Canadian Indian population and Israeli kibbutzim.

Slogett, Barbara B., Ronald Gallimore, and Edward S. Kubany

1970 A Comparative Analysis of Fantasy Need Achievement among High and Low Achieving Male Hawaii-Americans. Journal of Cross-Cultural Psychology 1:53.

Fantasy neeed achievement scores were obtained from male high school students representing three ethnic groups: Filipino-Americans, Japanese-Americans, and indigenous Hawaiians who were further categorized into high-achieving and low-achieving groups. The only significant differences were between the Japanese and the two Hawaiian groups who had the lowest n Ach scores. More importantly, the two Hawaiian groups differentiated in terms of experience, ability, achievement, and social class did not differ significantly in terms of n Ach. These findings were interpreted as challenging the usefulness of the notion that Hawaiian children do well or poorly in school because they possess or lack n Ach.

Stanley, Gordon

1969 Australian Students' Attitudes to Negroes and Aborigines on the Multifactor Racial Attitude Inventory (MRAI). Journal of Social Psychology 77:281-282.

The MRAI was administered to two groups of white Australian university students, one responding with the American Negro as target person (n=76), the other with the Australian Aborigine as target person (n=73). There were not significant differences between attitudes on these two groups and the cultural dissimilarity of the groups. The Australian students indicated a more favorable attitude to Negroes than American students.

Sundberg, Norman D., Pritam K. Rohila, and Leona E. Tyler

1970 Values of Indian and American Adolescents. Journal of Personality and Social Psychology 16:374-397.

Derived 17 hypotheses about Indian-American differences from a literature review. 9th grade Ss representing school populations in towns in Northern Indian (N=48) and Western United States (N=48) answered 90 Q-sort items. As expected, Indian Ss scored higher on deference and conformity, external control, extrinsic work values, and planning; Americans scored higher on sociability, sensuous enjoyment, and religiosity. Contrary to expectations, no differences were found on areas, i.e., individuality, free will, and democratic values. When items were dichotomized into endorsement and rejection, the two groups showed four times as much communality in divergence. Similarity was greater between sexes within the cultures than across cultures. Findings imply more complexity than is suggested by the distinction between traditional and modern values. JA

Sydiaha, Daniel, and Irving Rootman

1969 Ethnic Groups within Communities: A Comparative Study of the Expression and Definition of Mental Illness. Psychiatric Quarterly 43:131-146.

Examined differences between French and non-French samples in 2 Canadian communities in an attempt to assess the importance of "traditional," "local," and "societal" cultural factors. Seventy percent of 1 community was French and 13% of the other. No evidence was found "for the importance of ethnic factors ('traditional culture') in the expression of mental illness or in community attitudes and conceptions about mental illness...Minority groups in both communities tended to have a higher incidence of mental illness, and the non-French minority in the French community tended to be most uninformed in its attitudes and conceptions about mental illness." The pattern was considered an indirect ethnic influence. "Most of the statistically significant differences were obtained between towns, rather than within." JA

Szalay, Lorand B., Dale A. Lysne, and Jean A. Bryson

1972 Designing and Testing Cogent Communications. Journal of Cross-Cultural Psychology 3:247.

Experiments involving choice tasks were conducted to test the potential utility of word associations in constructing assertions and messages that are cogent in the sense that they actually bear on the interests and experiences of a particular audience. Similarity judgment tasks, which were based on verbal association data previously obtained from similar groups, were administered to U. S. and Korean student samples. The results supported the hypothesis that associations previously scoring higher by one cultural groups would be judged "more similar," "more related," by a groups from the same culture. In another experiment administered only to the Korean group, higher-scoring associations and their respective communication themes were combined into assertions. It was assumed that assertions based on strong associative linkages would be judged more meaningful by groups similar to the one on which the original data were obtained. The cogency of these association-based assertions constructed on the same themes by two cultural experts on Korea; the association-based assertions were found to be significantly more meaningful.

Tan, Mely G.

1968 Social Mobility and Assimilation: The Chinese in the United States. Ph.D. Dissertation, University of California, Berkeley.

This study proposes to examine the consequences of upward social mobility for racial or ethnic minority groups. Existing literature has shown that the question whether social mobility leads to structural assimilation, i.e., the disappearance of the group as a distinct entity, is problematic. The focus of this study is on the Chinese in the United States as a group which shows evidence of rapid social mobility and is recognizable as an ethnic minority group. The study is organized in two parts: documentation of the changes in socio-economic status of the Chinese, based on the Census data of 1940, 1950 and 1960; the investigation of the relationship of this development with the process of assimilation based on a sample of Chinese in San Francisco. The examination of the Census data shows an accelerated increase in nonmanual occupations, in educational attainment and an improvement in the income pattern. The investigation of the sample of the Chinese community in San Francisco indicates that those defined as socially mobile are higher in cultural assimilation and in structural assimilation on the secondary group level than those defined as less or not socially mobile. However, there are no differences among these groups with respect to structural assimilation on the primary group level. This finding gives support to our hypothesis that social mobility among the Chinese has not led to structural assimilation on the primary group level. The American-born Chinese identify as Chinese-Americans; they accept their status as "hyphenated" Americans and show no feelings of inferiority or inadequacy on account of it. They are convinced that they can be good American citizens while retaining some of their cultural characteristics and communal solidarity. Thus, we do not foresee the transformation from "ethnic stratification" to "class stratification" for the Chinese in the United States, nor the disappearance of the group as a distinct ethnic entity. We anticipate that the Chinese, as a group, may remain indefinitely in the state of structural assimilation on the secondary group level. This attitude indicates an adherence to the idea of cultural pluralism. A crucial factor for the acceptance of this idea as the basic philosophy in race and ethnic relations is the attitude and social climate in the larger society. Undoubtedly, in this respect, there is and there will continue to be variation in time, by area, by degree of favorableness and by race or ethnic group involved. Today, the social climate in San Francisco seems favorable, at least towards the Orientals; witness the recent addition of the name in Chinese characters on the street signs in the Chinatown area and the rebuilding of Nihonmachi or "Japan Town." JA

Taub, John M.

1971 The Sleep-Wakefulness Cycle in Mexican Adults. Journal of Cross-Cultural Psychology 2.353.

The sleep-wakefulness patterns of 257 Mexican males and females ranging in age from the 20s to 80s was studied using a questionnaire. The average duration of sleep exceeded that typically prescribed for other Western cultures (8 hours per 24), and significantly varied with age decreasting from the 20s to 50s, after which there was an increase. There was a significantly greater incidence of sleep disturbance in subjects over 50 compared to the other Ss the post-awakening mood of those with sleep disturbance and those over 50 was described by a significantly greater frequency of negative affect. Significant age and sex differences were found for the frequency of dream recall. The duration and frequency of daytime naps in Ss of all age groups revealed the presence of a polycyclic sleep-wakefulness cycle which has not been reported with such generality in other Western cultures.

Taylor, D. M., E. P. Dagot, and R. C. Gardner

1969 The Use of the Sematic Differential in Cross-Cultural Research. Philippine Journal of Psychology 2:43-51.

Two groups of English-Tagalog bilinguals rated each of 8 ethnic group labels on the same 48 sematic diffential scales. 102 responsed in English while a 2nd groups of 111 Ss was administered an identical form of the scales prepared in Tagalog by means of a back-translation procedure. Results indicate that there was moderate agreement between the factor structures of the ratings on both forms of the scales. In terms of responses on individual scales it seemed clear that the Ss who responded in their native language (Tagalog) were more willing to express themselves evaluatively than those Ss who made their ratings on the English form. JA

Taylor, Donald M., and Lise M. Simard

1972 The Role of Bilingualism in Cross-Cultural Communication. Journal of Cross-Cultural Psychology 3:101.

Mixed ethnic pairs of Ss (French/English) and same ethnic pairs (French/French and English/English) performed an experimental task designed to assess communicational efficiency. Following the communication tasks Ss completed a questionnaire which assessed their bilingual skills and attitudes about communicating with a member of a different ethnic group. The Ss, unlike previous studies, were French and English Canadian factory workers who daily interact with members of the other ethnic group. The results demonstrated that cross-cultural communication can be as efficient as within group communication. This efficiency seems to result because of a reciprocal bilingualism where members of each group have some degree of fluency in the language of the other. For the communication task both French and English were used almost equally and positive attitudes about communication were evidenced.

Termansen, Paul E., and Joan Ryan

1970 Health and Disease in a British Columbia Indian Community. Canadian Psychiatric Association Journal 15:121-127.

Reviews previous studies on the type and incidence of physical and mental illness among the legal Indians in British Columbia. Data was gathered from responses of 51 doctors to a questionnaire and the provincial mental hospital charts and interviews. Results indicate a low incidence of mental disorder and raise questions as to the "manner in which Indian communities define and deal with mental illness." JA

Thompson, L., and J. A. Hostetler

1970 The Hutterian Confession of Faith: A Documentary Analysis. Alberta Journal of Educational Research 16:29-25.

An experimental attempt is made to formulate the traditional character of the Hutterian Brethren from 16th century source documents. Original texts are analyzed in terms of 5 categories developed for purposes of cross-cultural comparison. The purpose of the analysis is to provide a basis for illuminating the problem of culture change in belief systems and to demonstrate a scientifically valid method of charter analysis using historial sources. It is suggested that this model may be found useful for effective comparison of value systems of mankind on a worldwide scale. JA

Torrey, E. Fuller

1970 Mental Health Services for American Indians and Eskimos. Community Mental Health Journal 6:455.

Surveys past and present mental health services for American Indians and Eskimos and finds them to be inadequate. A plan is outlined for the development of such services based upon a cooperative rather than a paternalistic venture with these minority groups. The plan is based upon the use of indigenous therapists for individual and group psychotherapy, the modification of etiological beliefs, and an emphasis upon primary prevention. The Alaskan Eskimo is used to illustrate how these principles could be put into effect. The outcome would be a system of mental health services specifically adapted to the culture, realistically commensurate with available manpower, and compatible with dignity for the group.

Trible, Joseph Everett

1969 Psychosocial Characteristics of Employed and Unemployed Western Oklahoma Male American Indians. Ph.D. dissertation, The University of Oklahoma.

This study initially addresses itself to the problem of acculturation and, in particular, the problems of unemployment encountered by the Indian. More specifically, the main focus is an investigation into some of the psychosocial characteristics of the unemployed and employed Indian. Representing 19 different tribes living in western Oklahoma, 143 Ss were presented with the California Psychological Inventory and a Labor Force Survey. The data, in the form of 69 variables on each S was analyzed by various multivariate statistical procedures. The findings from the analysis indicate that a set of *a priori* variables can serve as an index for discriminating between unemployed and employed Indians and that such a set of indices can serve to predict the probability of association for each S to one group or the other. Additional analyses were performed in the personality differences and several salient differences were found, particularly in the area of social and moral responsibilities, achievement potential, and certain other elements of the self concept. Additional nonparametric analyses were performed on certain sociological variables that constituted a modified "acculturation index" and several salient differences were found. Among those were the facts that the level of education and vocational training were unrelated to employment status. Finally, the study analyzed possible implications of the differences and suggested follow-up research on the predictive validity and the implementation of the indices to assist in a resolution of the unemployment problem among Indians. JA

Trujillo, Rupert

1969 Rural New Mexicans: Their Educational and Occupational Aspirations. Ed.D. dissertation, The University of New Mexico.

The purposes of this study were to investigate, within the framework of level of aspiration theory, the effects of an educational-occupational program on 1) rural adults' educational and occupational aspirations and general areas of beliefs which tend to affect the individual's ability to adapt to the conditions of urban economic life, and 2) rural students' educational and occupational aspirations, general areas of beliefs which tend to affect the individual's ability to adapt to the conditions of urban economic life, and school attitude. The data for the study were gathered in Sandoval County, New Mexico. A program titled Home Renovation was administered by the County Welfare Department under Title V. The purposes of the program were to 1) provide underemployed and unemployed rural adults with training in home construction and adult basic education and 2) renovate substandard houses of eligible welfare clients in the county. Five major hypotheses were constructed to guide the study; they dealt with the relationship between training and house improvement and the dependent varibles of aspirations, work beliefs and school attitude. Four groups of adults and four groups of students were selected for the sample. Two groups of adults (the experimental groups) either had received training or had their houses improved; the two adult control groups were similar in significant characteristics to the experimental gorups. The students resided in these adults' homes. The total sample consisted of 110 high school age students and 90 adults. Statistical techniques to analyze the data were one-way and two-way analyses of variance. The findings from this study revealed that the educational-training under consideration in this study served to change attitudes of participants of their offspring. A positive relation exists between short-range idealistic aspirations of adults living in a house that has been renovated. The educational aspirations of adults who received training were found to be higher than the educational aspirations of adults who had not received the training. Results indicate that students have higher aspirations than their parents. A positive relation was found between attitudes toward change, mobility and adaptability and students' living in improved houses. Probably the most noteworthy finding was the fact that students living in improved houses attended school more often than students from houses which had not been improved. JA

Vogler, James Donald

1968 The Influence of Ethnicity and Socioeconomic Status on the Pictorial Test of Intelligence. Ed.D. dissertation, University of Arizona.

Problem: This study sought to determine the influence of ethnicity and socioeconomic status on the Pictorial Test of Intelligence (PTI) by investigating the following questions: 1. Does ethnicity of socioeconomic status effect differences in the distribution of IQ or individual subtest scores on the PTI? 2. Does ethnicity or socioeconomic status effect differences in the overall pattern of PTI subtest?

3. Are there items which are less culturally weighted than others?

4. Does ethnicity or socioeconomic status effect differences in predictive validity of the PTI?

Procedure: Responses to the PTI were obtained from 108 subjects representing samples of 27 subjects each selected from four different ethnic and socioeconomic status groups (upper Anglo, upper Mexican-American, lower Anglo, lower Mexican-American). In addition, their scores on the Metropolitan Readiness Test, Stanford Achievement Test, and their grades in reading and arithmetic were also obtained.

Findings and Conclusions: One-way analyses of variance revealed significant differences (generally in favor of Anglo ethnic group membership and upper socioeconomic status) among the four groups in the study of all but the Immediate Recall subtest. Factorial analyses of variance indicated that there was no significant interaction between ethnicity and socioeconomic status. It was also indicated that socioeconomic effected differences in six of the seven separate scores (total and six subtests) while ethnicity effected differences in only three of these. Thus, it was concluded that socioeconomic status contributed more to the group differences in PTI scores than did ethnic group membership. The separate subtest scores for the four groups in the study were converted to normalized standard scores and, through analysis of variance, significant differences among the overall patterns were found to exist. The chi-square test was applied to the differences among the number of subjects in each of the four groups passing a particular item. With the exception of those items which could not be tested because of low excepted frequencies, all of the items on the Immediate Recall subtest failed to discriminate at or beyond the .10 level of significance and thus were determined to be "culture fair." It was noted that the predictive validity of the Immediate Recall subtest, as evidenced by the correlation with Stanford Achievement Test mean subtest scores, was only .09. The remaining subtests, by comparison, ranged from .40 to .59. Thus, it was concluded that removing the "cultural differentials" from a test may reduce its validity for the prediction of a culturally loaded criterion such as educational achievement test scores. No significant differences were found to exist among the four groups in the study in correlations of IQ scores on the PTI with Stanford Achievement Test scores or grades in reading and arithmetic. Significant differences did exist, however, in correlation with the Metropolitan Readiness Test. On the basis of the findings of the study, it was concluded that the PTI tends to discriminate against children from the Mexican-American and lower socio-economic status cultures in much the same fashion as the majority of the existing intelligence tests. JA

Werner, Emmy, E., and Rajalakshmi Muralidharan

1970 Nutrition, Cognitive Status and Achievement Motivation of New Delhi Nursery School Children. Journal of Cross-Culutral Psychology 1:271. Significant differences in head circumferences and growth rate, the Draw-A-Man IQ and measures of visual-motor development were found between

between 24 inadequately and 16 adequately nourished New Delhi nursery school children from lower-middle class homes. No differences were found on measures of language development when parental income, occupation and nursery school attendance were controlled. Results of achievement motivation tests varied with the sex of the child. On most measures, inadequately nourished children showed greater variability than the adequately nourished, and inadequately nourished girls had lower mean scores than inadequately nourished boys.

Weston, Peter J., and Martha T. Mednick

1970 Race, Social Class and the Motive to Avoid Success in Women. Journal of Cross-Cultural Psychology 1:283.

This study sought to examine race and social class differences in the expression of fear of success in women. This concept, termed the Motive to Avoid Success (M-s), was developed and utilized by Horner (1968) to explain sex differences in achievement motivation. In our study, M-s imagery expressed in response to TAT-verbal cues was compared for black and white college women and two social class levels. The hypothesis that black women would show less M-s than white women was supported. The findings held for subject at two schools and for two verbal cues. Social class differences were not found. Several interpretations and suggestions for follow-up studies are given.

Williams, Trevor H.

1972 Educational Aspirations: Longitudinal Evidence on Their Development in Canadian Youth. Sociology of Education 45:107.

The development of educational aspirations in high school students is represented in a causal model developed from the point of view of reference group theory and including measures of the influence of referents at two points in time. Change in the relative effects of the various causes specified in central to the investigation. The model is quantified via path analytic procedures separately for males and females using data on 3,687 Canadian students. The data suggest that the influence of referents changes over time, that parents exert the greatest influence, and that sex differences in this decision-making process are manifest.

Wolman, Carol

1970 Group Therapy in Two Languages, English and Navajo. American Journal of Psychotherapty 24:677-685.

Reviews those social factors which lead many Navajo reservation Indians to alcohol abuse. Group therapy sessions are described where the Navajo language was employed and translated to the therapist by an interpreter. Guidelines for future groups of this nature are suggested. JA

Young, Virginia Heyer

1970 Family and Childhood in a Southern Negro Community, American Anthropologist 72:269-288.

The American Negro family is generally interpreted, ethnocentrically, as an impoverished version of the American White family, in which deprivation has induced pathogenic and disfunctional features. This concept of the family is assumed in studies of Negro personality formation, which furthermore have relied entirely on clinical methods of research. Fieldwork among Negro town-dwellers in the Southeastern United States plus a reassessment of the literature yield a sharply contrasting portrait and interpretation of the American Negro family in which organization strength and functionality are found. Observations of parent-child relations show highly distinctive behavioral styles, some of which have remained undiscovered by psychoanalytically oriented studies and others of which differ markedly from the extrapolations of clinical research. These forms and styles are viewed as aspects of an indigenous American Negro culture. Finally, the formative effect of an indigenous culture is argued as a corrective to the common viewpoint of deprivation as the prime cause of Negro behavior.

Za'rour, George I.

1972 Superstitions among Certain Groups of Lebanese Arab Students in Beirut. Journal of Cross-Cultural Psychology 3:273.

This study is partly exploratory to assess the extent to which superstitious beliefs and behavior are common among different groups of high school and university of Lebanese Arab students in Beirut. Class level, sex, high school science achievement, and major were the main variables that were investigated as to their relevance to superstitiousness. More than 600 students in the 8th and 11th high school grades and university sophomores answered 59 items relating to superstitions with respect to acquaintance, belief in, and influence on behavior. It was found that superstitiousness, significantly decreased with increasing level of education. Among the

other variables investigated, the major findings were that among the university sophomore students, females and arts students were respectively more superstitious than males and science students.

Ziegler, Michael, Michael King, Johanna M. King, and Suzanne M. Ziegler
1972 Tribal Stereotypes Among Ethiopian Students. Journal of Cross-Cultural Psychology 3:193.

Ethnic stereotyping by Ethiopian students of four important ethnolinguistic groups (the Amhara, Tigre, Galla, and Gurage) was investigated. The method used was a modification of the Katz and Braly technique for assessing generality of stereotypes. The tendency to stereotype both one's own and other groups was quite marked, and there was considerable overlap between in-group and out-group description. Where there were discrepancies, the in-group evaluation was more positive and the out-group evaluation more negative. Individuals showed consistent differences in tendency to stereotype. Some of the stereotypic adjectives used support earlier, European descriptions; others indicate that Ethiopian students' attitudes reflect the country's movement towards modernization and Westernization.